A Presidential Address
ON
THE PROGRESS OF SURGICAL METHODS.

Read before the North of England Obstetrical and Gynæcological Society on Dec. 20th, 1901,

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GENTLEMEN,—My first duty is to thank you for the honour which you have done me in electing me to be your president. I need hardly say that it is an honour which I appreciate very highly; and since you have made me your president there is a pleasant duty which devolves upon me, and that is to address you on some subject connected with gynæcology. It is unusual at such a time for the reader of the address to be interfered with or criticised, so that the president can say what he likes without much fear of contradiction. This, of course, is a great distinction and at times it may be felt to be a great advantage; it at least shows the trust and confidence which the society has in its presidents, but as we all have the same object at heart, the advancement of gynæcology, I think that it is rather a pity that criticism, tempered with leniency, is not the rule. On this occasion if any one of my audience feels inclined to criticise my remarks, although it would be contrary to precedent, I shall not rule him out of order but shall take it as a compliment and a sign that I have managed to interest him.

In casting about for a subject on which to address you I have not looked very far afield. I have taken the subject which appears to me to be the most important and which looms largest in the mind of the operating surgeon. It is the Progress of Surgical Methods—one might almost say the revolution in surgery. This is a theme upon which much has been written, and although I can hardly hope to add anything to this great subject, yet, however feeble my tribute, I feel that I must lay my homage at the feet of the great master of our art, Lord Lister, and pay reverence to the memory of that great Frenchman, Pasteur, from whom Lister's first inspiration was derived. When one considers the anxieties, the nervous strain, the bitter disappointments of the earlier surgeon, the horrible sufferings of the patient, which were sufficient to make the life of the surgeon a terrible ordeal such as few could endure, one cannot help feeling a spirit of devout thankfulness for the privilege of having lived after Lister's epoch-making discoveries.

There are three stages in the progress of surgical methods which I propose to touch upon; they are very striking and are significant of the theory of the method of healing of the day. These three stages are: (1) the open method period; (2) the drainage-tube or vent period; and (3) the period of complete closure. These three stages, of course, correspond with the pre-antiseptic, the antiseptic, and the aseptic periods. In the first of these periods suppuration was supposed to be inevitable and was encouraged by the surgeon. It was considered that the wound must be "digested" before it could heal and the wound was left open to accord with this theory. In the second period suppuration was expected and a vent was left for its exit. In the third period the presence of suppuration denoted failure. It was not expected and the wound was completely closed.

As illustrating the results obtained during the first period, when the open method of treatment was in vogue, I will quote the results of amputations performed about 100 years ago, as stated by Alanson, one of the members of the staff of the Liverpool Royal Infirmary at that time. Alanson was a man of great originality, a most careful and successful surgeon, and an observer of great intelligence. He was much in advance of his time and was the inventor of "flaps" in the amputation of limbs. He says:—

> Of 46 amputations at which I was present and had the opportunity of inspecting the after-treatment, 10 died; one of the lockjaw; two of hæmorrhage from the whole surface of the stump; four from the hectic fever and extensive suppurations; and three from a spreading gangrene on the surface of the stump. 18 had a hæmorrhage, six from the whole surface of the wound, and 12 from a particular vessel or vessels. In nearly the whole, the symptomatic fever was violent; the startings and spasms frequent; the suppuration large; the surface of the wound extensive; and in all the first dressings were painful. In most of them, there was an exfoliation; and in several a sugar-loaf stump; and in some the wound remained incurable.

I will not read any account of the operations, but were I to do so you would not be surprised at the results being poor. If along with this you consider the material upon which the operations were performed and the enormous disadvantages under which the surgeon laboured you would wonder that any patients at all recovered. Of course there was no anæsthetic, and the patient, fearing the pain of operation, would put it off till he could go on no longer. The hospitals also were not all that could be desired. In spite of all this, however, Alanson performed 35 amputations with no mortality. As far as mortality goes these results of Alanson would compare with those of the present time, but the method and ease of recovery would be very different. He himself mentions incidentally a patient's remark "that the first dressing was worse than any part of the operation." Alanson's results were due to individual genius and care and did not at all represent the general results of the surgical community. Unfortunately at that time there was no North of England or other medical society at which Alanson could enunciate principles to enlighten the world; he was merely able to do better work than his contemporaries and he wrote a book. Having no microscope he was not in a position to prove by actual demonstration the soundness of his principles, although his results showed the value of his methods. His teaching was in consequence forgotten. Before passing on I should like to quote some of Alanson's observations on hospital management, which will give you some idea of the genius of the man and the difficulties which surrounded the surgeon of those days. He says:

> Many hospitals are so tainted by unwholesome effluvia, that they are rather a pest, than a relief to the objects they contain. The following regulations are humbly recommended to the consideration of those, who have the care of hospitals in want of such attention. 1. No ward should be inhabited for a space of more than four months together; for it is impossible to keep a room healthy, that is constantly crowded with diseased people; the walls should be scraped, whitewashed and every other necessary means used for the purification of the air, before the re-admission of patients. 2. The bed-stocks should be made of iron, to prevent the lodgement of vermin and the more easy absorption of putrid matter. 3. The bedding should be more frequently changed, than is usually done; the bed-tick stuffed with chaff, hay, cut straw or materials of such easy expense, as to admit of their being frequently changed. 4. Where the hospital is conveniently situated for the purpose, all the patients that are able, should carry out their bedding and expose it in the open air, for several hours every day, when the weather permits. 5. On the days of admission, those patients that have inhabited foul ships, jails, cellars or garrets, workhouses or other infected places; or whose clothes are dirty, or suspected to contain vermin, before they are suffered to appear in the ward, should first be stripped, and washed in the warm bath, and afterwards clothed with proper dresses, provided at the expense of the Charity; by which means the evil of importing infection, so detrimental to the salubrity of every hospital, would be greatly remedied.[1] ..... 7. The infected clothes should be baked in an oven constructed for the purpose; by which all vermin and infection will be destroyed; and the clothes may be returned clean to the patients, when they are discharged the Hospital. 8. The patients, when received on the days of admission, should be placed in the wards that have been last ventilated, and not in those, that have been long inhabited, where it may reasonably be presumed, the air is considerably tainted. 9. All incurable or infectious cases should be refused admittance; and amongst these should be classed old chronic ulcers of the legs, and particularly these in which there is great loss of substance, for these seldom remained long healed; hence most Hospitals are so crowded, that the intention of the Charity is perverted, as the air is rendered unwholesome. 10. All offensive, gangrenous, or other putrid sores, should be placed in distinct rooms provided for that purpose; and not suffered to taint the whole ward. 11. There should be particular rooms provided for those patients who are the subjects of operations; they should be in the most airy situation, never long inhabited and alternately cleaned and ventilated, as before advised. 12. A Hospital should never be crowded on any account; and always of so large a construction, that some part of the building may at all times be uninhabited, for the purpose of whitewashing, ventilation, &c. 13. When any person has been afflicted with a putrid disease, or confined to bed for a length of time, let the bed be emptied, and the bed-stocks, the bed, the sheets, and other linen be washed, and the rest of the bedclothes exposed for some time in the open air, and baked in the oven before they are used again. 14. Let the nurses see that every patient's hands and face are washed every morning; and their feet, once a week. 15. Let the nurse of each ward be liable to a fine, to be deducted from her wages, if some of the windows in her ward, are not kept open, during a stated number of hours every day. 16. To every infirmary, particularly where the wards are crowded, a house in the country, well situated, and at a convenient distance, should appertain; without such assistance many of the patients must perish, which would be easily and certainly preserved, and it will be found, (as may without difficulty be demonstrated) the best policy in the Trustees of an infirmary, to provide such an appendix. By such assistance patients may be speedily cured, at a small expense; but, if suffered to remain in the Infirmary, their recovery will either be prevented, or obtained in a great length of time, at a considerable expense, by the

[1] The sixth regulation which applies to the dresses need not be given.

most costly drugs, nutritious diet, &c.; likewise the house will be crowded with the most miserable objects, to the anxiety of those that attend them, and the exclusion of other patients, who might have been cured in the interim. Many hospital-surgeons are under the necessity of providing lodgings in the country, at their own expense, for their patients who have undergone operations; rather than suffer the pain of a disappointment in completing a good cure or seeing their patient languish under a hectic, incurable in a crowded Infirmary. Therefore it is hoped that these considerations will influence the humane Trustees, to provide these conveniences for the poor sufferers.

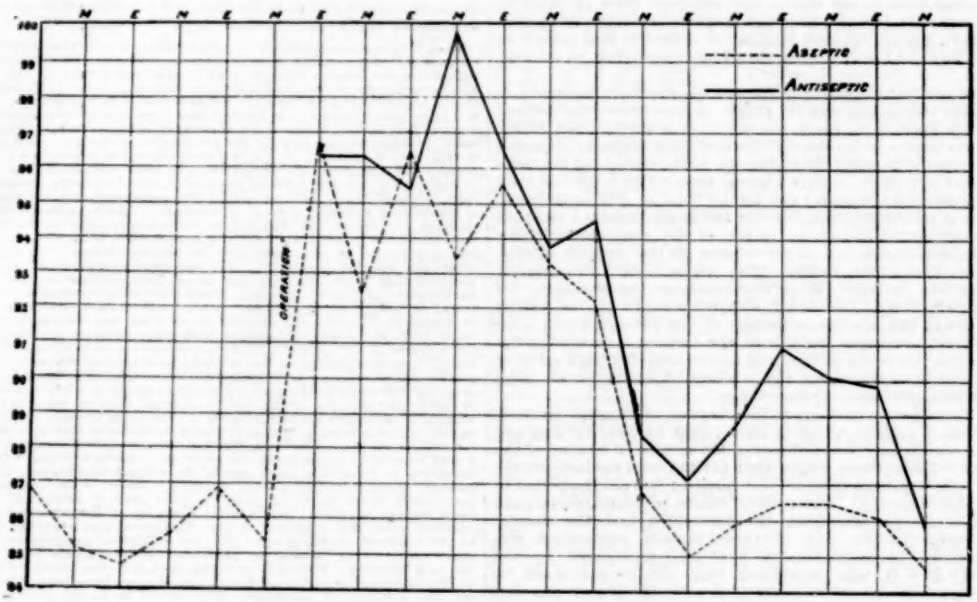
I think, gentlemen, that although my quotation has been rather a long one, yet it is a most interesting thing to remember that these remarkable suggestions were made 120 years ago by Edward Alanson, surgeon to the Liverpool Royal Infirmary, and I doubt whether they could be improved upon at the present day; we are not yet able to say that all the improvements indicated by him have been accomplished. He was indeed in advance of his time and was very near the truth as it appears to us to-day. The main point that strikes one is the great importance which he evidently attaches to the part played by the air in the spreading of infection. We think less of the air and more of the hands as infection-spreaders. We think less of infection and more of contagion. This seems a small difference, but it is a fundamental difference in principle, which is responsible for nearly all that divides our present work from that of 100 years ago. Owing to our better hospital construction the want of ventilation, &c., has been removed from our list of enemies and we can confine our attention to the dangers of contact. So much for the first period.

The second period, or the antiseptic stage, is so recent that it is not necessary to recall what is known to everybody. In the short period of 20 years or little more a complete revolution in surgical methods has taken place, and it would hardly be exaggeration to say that in that time we have passed from night into day. For although there must be much to learn and to simplify in the future, yet when we compare the methods of to-day with the methods of 20 years ago we may almost say that we are now already in the full light of noonday. I well remember an incident which happened when I was a dresser, not such very remote ages ago. It made a great impression on my mind at the time, and I have often pondered over it since. To us to-day it sounds like a story of the Middle Ages. A man was brought into hospital having fractured his patella. At about this time Mr. Lister had been suggesting wiring together the fragments as a method of treatment. My chief said that he thought this case would be a suitable one on which to try the new method of treatment, and it was arranged that the operation should be performed upon the following day. We all forthwith went down into the post-mortem room and practised this new operation. There was one gimlet which pierced the bone in a marvellously easy way, in a way that none of the others would. The surgeon naturally said, "We will use that one to-morrow," and we did. The operation was performed on the following day in a most masterly fashion, under a cloud of carbolic spray and (according to the notes) "with the strictest antiseptic precautions." Things went wrong, however, and the man died from septicæmia. The gimlet had killed him. But the antiseptic system and the new operation were blamed at the time. We have learned much since then, and it seems remarkable to us now that anyone could be so blind; but it is well to remember that the men who appear to us so blind were the leaders of the profession and the most advanced men of the time, and we must expect to appear just as blind to the next generation.

We are now passing from the antiseptic period to the non-antiseptic or aseptic period, and if we do not attain the results that have been attained by some we should not at once blame the system, but carefully criticise our own technique and remember the story of the gimlet.

It is hardly necessary to say that when I use the term "aseptic surgery" I use it in the sense of being without antiseptics. I do not care for the term, but I do not know a

FIG. 1.



Mean pulse chart of 80 cases of abdominal section—40 aseptic and 40 antiseptic.

better unless we borrow a term from medicine and speak of "prophylactic" or "preventive" surgery. The term "preventive" would indicate the principle which underlies our present practice. There always seems to have been a fascination for the surgeon to put something into his wound to make it heal better. In the pre-antiseptic days at one time it was the fashion to fill the wound with boiling oil, at another the wound was stuffed with dry lint and freely dredged with flour, and many other devices were employed. In the antiseptic period wounds were douched and swilled with antiseptics and sometimes filled up with iodoform. In the aseptic method there is nothing put into the wound to irritate it or to help it to heal; the object is to keep out all that is detrimental to healing.

Aseptic surgery is a stage onwards towards the goal of perfect surgery. We all hailed antisepsis, and now we should all hail asepsis. Antisepsis naturally came first and

was the means by which we were able to advance the art of surgery so enormously that satisfaction and gratification beyond the dreams of the most sanguine were gradually realised. This satisfaction has been so great that some are even still complacent with surprise at the marvellous results. However, after this first surprise at unexpected successes, there has risen gradually a feeling that perhaps there may be something even better still, something to criticise even in the best results yet attained by the antiseptic method, marvellous as these are when we compare them with the results of a short time back.

And so we come to the third or aseptic stage, and there is no doubt that this is a decided step in advance of the antiseptic stage and the advance is measured by the ease of recovery after operations. Of course, there has been gradual and decided improvement since the antiseptic stage commenced, and the results at the end of the antiseptic stage became so good that we cannot expect a startling improvement at the commencement of the aseptic stage similar to that at the commencement of the antiseptic stage. Further, we must remember that the actual change is only comparatively slight from the end of the antiseptic method to the commencement of the aseptic method. The chief difference is a difference in principle indicated by the term "preventive." However, in spite of all this I think that there is a distinct improvement in the results that I have obtained by the aseptic method over anything that I have obtained by the antiseptic method.

I do not propose to enter into minute details of my present method of operating, but I will merely say that I now use no antiseptics whatever during operations. When the operation commences all antiseptics are laid aside, and where formerly I used antiseptic lotions and antiseptic dressings I now use sterile water and sterile dressings. I do not allow any antiseptics to get into my wounds. The skin of the patient and the hands of the operator and assistants are prepared most carefully with antiseptics, but as soon as the operation commences no further use is made of antiseptics. The method of hand-cleaning which I adopt is the permanganate and oxalic acid method. This method is most satisfactory and has stood some very severe tests that I have subjected it to. Cleaning hands by this method certainly takes some time—about 20 minutes—but I am sure that it is time well spent and that you are amply repaid for it. In my operations we take every preventive precaution that we can think of to ensure asepsis, but as these details would necessarily be tedious I shall not allude to them further; in place of detail I will express a sentiment which is, I think, true and useful. The success of the operation depends upon the preparations for its performance—that is, upon the completeness and efficiency of the prophylaxis. The comparison which I have made between a series of antiseptic operations and a series of aseptic ones certainly has been all in favour of the aseptic series.

In order to show the results of the above-mentioned series graphically I have constructed two composite charts, and my thanks are due to my house surgeon, Mr. O. T. Williams, for the help which he has given me in drawing these up.

The charts (Figs. 1 and 2) represent 80 cases of abdominal section—40 antiseptic operations and 40 aseptic operations. The black line marks the antiseptic series and the broken line the aseptic series. The charts were made in the following way. The pulse and temperature in each case were recorded twice daily, at 10 A.M. and at 6 P.M. The record on the composite chart was obtained by adding together the records on the individual charts of each series and dividing by 40 to get the mean. The mean pulse and the mean temperature in each series are given on the charts for three days before and a week after operation. (In the antiseptic series there is no record of pulse before operation.) You will notice that the broken line, representing the aseptic series, is always inside the black antiseptic line; this denotes an easier recovery after operation in the aseptic series. In looking at these charts you may be inclined to say that there is a greater rise in pulse and temperature than you would expect and that your own results would be better than those which I show you, but you must remember that these composite charts include all cases, bad and good, easy or difficult, and this is the mean of the whole lot. I could show you individual charts in the antiseptic or aseptic series in which there was no rise of pulse or of temperature whatever, but this is beside the point; what I want to show is that there is an average improvement in the aseptic series and that it is an improvement on results which will not compare badly with

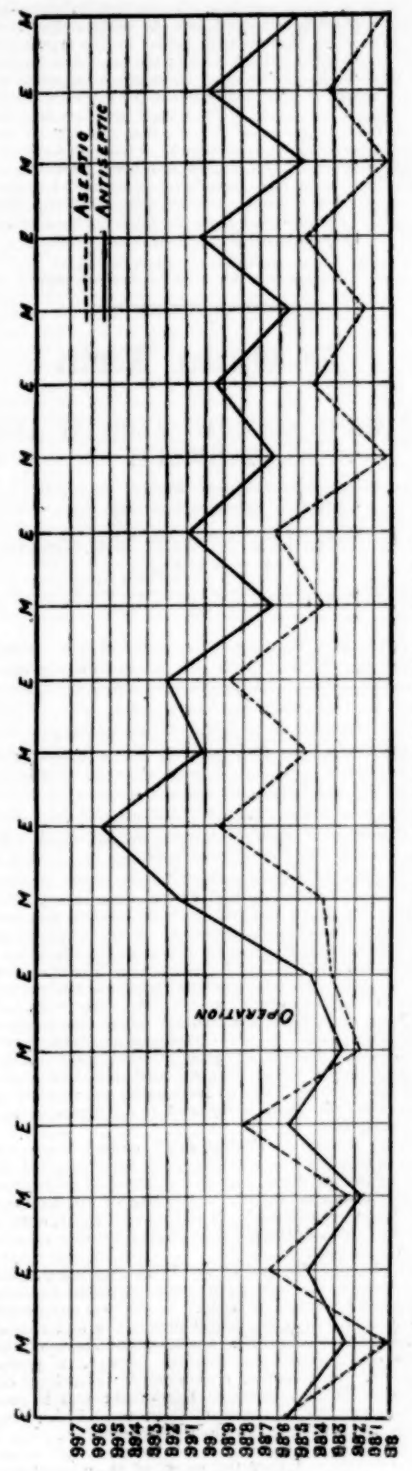


FIG. 2.

Mean temperature chart of the same 80 cases as in Fig. 1.

the results of other operators. I consider that my antiseptic composite chart is very good, but the aseptic chart is better. You will notice that in both series on the fourth morning after operation the patient is well; the pulse and temperature have returned to the normal. There are other points which I cannot show you graphically but of which I feel fully convinced in my own mind. There have been less pain and less trouble from flatulence after operation, and I think that the scars are less inclined to be keloid. I have no doubt that the general comfort of the patient has been increased. These results have been most gratifying to me, and in presenting them to you I have endeavoured to avoid anything like high colouring. I trust that I have not rendered them colourless, but Pope's lines have all along been in my mind:—

> "To observations which ourselves we make
> We grow more partial for the observer's sake."

An Opening Address

ON

THE ART OF CLINICAL MEDICINE AND ITS TECHNIQUE.

Delivered before the Students' Medical Society of the Leeds Medical School on Oct. 18th, 1901,

BY WILLIAM EWART, M.D. CANTAB., F.R.C.P. LOND.,

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GENTLEMEN,—My sense of the honour of your invitation to address you to-night, if it can be equalled by anything, could only compare with the pleasure of finding myself among you in the congenial and invigorating atmosphere of a students' debating society, an old student among those of youthful aspirations and promise, for a semi-confidential talk on matters of intimate concern to us all. To this society, among all other students' medical societies, it is now my privilege to wish every success. The secret of their usefulness and attraction is largely the same as that which facilitates the successful study of clinical medicine and which is also fundamental to the position and dignity of the medical confraternity—collaboration and mutual help: every man contributing his share and ever ready to help his fellow in the joint service of suffering humanity. There is another feature in students' medical societies which suits our subject—it is their universality. Clinical medicine itself is all-embracing. It claims not only a relationship with various kindred sciences but also their constant service. All the work of this prosperous and progressive medical school practically tends to one end, which in my experience has been thoroughly fulfilled—the making of good clinical men. Although, therefore, in offering any clinical advice in this place I feel guilty of bringing coals to Newcastle, your liberality will discern that this fault is inherent to my theme rather than to my intention.

On the subject of clinical art I cannot spare you the infliction of a few true aphorisms. It was the art of clinical medicine which drew from the greatest of physicians the pathetic utterance equally descriptive of all human art—"*Ars longa, vita brevis.*" To the present day it remains the longest of arts and therefore its study must claim the largest share of our time.

"The ideal is the soul of art." This aphorism, though it might seem to be hardly opportune, underlies the whole of our practical purpose to-night. It declares our belief that clinical medicine is eminently progressive and that a brief consideration of some of its tendencies and some of the conditions of its future advance is, perhaps, a pardonable digression. Imagination, that humble "occasional helper" of science, is art's principal handmaid; and it may not be altogether idle to dream of those possibilities which are not yet fully within the reach of this generation.

"*Ars imitatio naturæ.*" This is above all others the clinical aphorism. Half the secret of the clinical art is the correct observation of nature, the other half its successful imitation. But I must not dwell upon that important topic, but at once draw your attention to another aphorism most intimately connected with the purpose of this address—"All art consists of the technique and of the production."

The work of art brings into free play man's highest intellectual and physical attributes; but only provided they have been liberated by patient practice from all mechanical struggle with the accidents of technique. These two components of art are not only distinct but are in some respects in glaring contrast. Nothing could be more prosaic, mechanical, and laborious than the study of technique which is to furnish the ideal with its incarnation. All this is strikingly exemplified in the study of clinical medicine, and the distinction between the technique and the performance is one which it will repay you to grasp at the earliest stage.

I have dwelt upon points of resemblance. In one respect clinical medicine differs from all other arts. Perfection such as is achieved by other artists is denied to us. Our task almost passes the wit of man. It is that of remedying damage and disturbance in a machine of unimaginable complexity. A few hard facts are supplied to us by the sciences; and in addition to these, our scientific facts, there are the so-called great principles of medicine, most of which are empirical postulates and cannot take rank with experimental evidence, but nevertheless are of immense practical value. These are our assets; but when the balance is struck the sum of our actual knowledge is vastly inferior to that of the unknown and perhaps of the unknowable. In other words, our art is an amazing combination of strict knowledge and of absolute ignorance, of minute accuracy and of immense vagueness—it is an art of sciences and an art of the unknown.

But there is a greater inconsistence. Though we confess our ignorance we are as practitioners not allowed to plead it as an excuse. Where life is trembling in the balance something must be done, and our patient expects this something to be the right thing. To act for the best in spite of pervading ignorance is indeed an art. Let it, then, be no slur upon clinical medicine that it is eminently versatile, that it looks all around for help, and that, when it is deserted by science, in its distress it should call imagination to its aid and should not shrink from consulting empiricism. Empiricism and science are a powerful combination. Traditional empiricism—the accumulated experience of countless generations of untrained observers—although hardly as trustworthy as the unthinking instinct of animals, still is a mine of treasure which has only begun to be worked with the searchlight of science. Happily in the perplexity of many counsels we fall back upon the great clinical precept, "*Non nocere,*" and though science may fail us there is one ever-trusted guide, "*Imitatio naturæ.*" The methods adopted by nature are our standard and the test of the safety of our tactics. In spite, then, of our ignorance our treatment may still be of the best if we can succeed in reading nature, not only in a general sense, but nature as she presents herself in the individual patient, and in acquiring that insight which the laity so aptly describe as a knowledge of the patient's constitution.

MEDICAL EDUCATION, PAST, PRESENT, AND FUTURE.

If I may use the privilege of this debating society to discuss debateable questions, the following considerations may be of interest and perhaps of indirect service.

There are two prominent signs of the times. The first is the rapid and irresistible expansion of science in clinical medicine; to this the public mind has been effectually awakened, and patients not only desire but claim to be treated with all the resources of science. This tendency in therapeutics is reflected in medical education; and practical shape is now being given to it by the growth of the idea of the clinical laboratory, probably the most important element in the clinical system of a near future. No less significant is the other contemporary innovation—the post-graduate system, which symbolises the need which is felt for more clinical instruction. The extraordinary sacrifices made for the sake of further clinical opportunities by members of an overworked profession illustrate the urgency of that need. These two tendencies give special prominence to the prevailing dissociation between the science course and the clinical course to which further reference will be made.

History is full of teachings. Looking back 150 years ago, prior to the birth of modern science, we find the simplest expression of medical education on the pattern of the mediæval trades and guilds—a practical training beginning at an early age—and a course of theory as a finish for maturer years.

Early practical training has always been in this country the tradition for all careers. The apprenticeship was intended to train up the future medical man from the practical side; besides an elementary introduction to medicine and surgery there was much in it which was to prove of use in the daily routine of the profession—namely, an acquaintance with some of the functions of the apothecary corresponding to those of our nurses of to-day, and with some of the functions of the dispenser which included the handling of drugs and the preparation of remedies as well as their uses. By degrees, also, the apprentice grew into the ways of practice, developed a sense for those requirements of the patient which are not purely medicinal, and evolved the professional attributes of tone and manner which are often the most important aids to treatment, at any rate for its appreciation. This was an exclusively clinical training, in itself rational and good, and well suited to the needs and opportunities of the time.

We need not follow the series of changes which have ended in our present system; they corresponded to the period of evolution of modern science and to its increasing influence in medicine. Knowledge which could not be acquired in the country surgeon's practice had to be sought in the medical schools, and gradually the apprenticeship died out, never to be revived in its original form, and the loss of its educational functions was never completely made good. Whilst this blow had been struck at clinical education a powerful stimulus was given to the study of anatomy which contributed to the great development of surgery at the end of the nineteenth century. The second third of the century was witnessing already a further change: a scientific training had been thought of, and since then the constant struggle has been to keep medical education up to scientific date. On the continent the State-aided universities took the lead in practical laboratory training and outstripped us fully for one generation; but we are now drawing level with them. Early practical training is once more the order of the day, but it is no longer devoted to clinical medicine but to pure science; and from this change there is no going back. More and more time had to be claimed for science until at last, before the introduction of the five years' curriculum, clinical medicine and surgery were reduced to starvation allowance. Whilst, then, originally the tendency was simply clinical, now pure science precedes for two years the purely clinical stage. In the future, perhaps, the study of science may go hand in hand with clinical study to the end of the curriculum. More recently other minor revolutions have taken place, such as the sacrifice of the ornament of classical education and of the proud ambition to know *de omni re*. Some useful collateral subjects, such as botany, zoology, and mineralogy, have practically been given up, though they may now be missed by the few in connexion with exploration and by all in connexion with the coming subject of medical climatology.

THE CURRICULUM.

The present curriculum has been so difficult to arrange and is so perfect in its adjustment that none would dream of touching it so long as it continues to serve. Its provisions, if they entail great labour—sometimes almost to the verge of endurance—at any rate spare the student all loss of time and all perplexity during the hardest struggle, that of the first two years. At the same time it is obvious that there can be no finality in curricula, for whilst the march of science is continuous and gradual, their changes are artificial, spasmodic, and radical, and therefore subject to amendment. Even our present system is not sufficiently elastic to lend itself to future requirements. Modern medical education presents the following features in contrast with previous conditions: (1) the large share awarded to pure science; (2) the increased importance given to practical work in science; (3) the strict exclusion of any clinical subject from the science curriculum; and (4) the practical exclusion of any systematic study of anatomy and of physiology from the later years. There has been an artificial separation between the scientific and the clinical training; and the question is whether this teaching in compartments has been a success in the direction of clinical fitness. It is too often obvious that those fruits of the science course which are essential to clinical efficiency—physiological chemistry and visceral anatomy—are not available when they are wanted, that the burden to the memory has been too great, and that some relief is needed. Both compartments are overcharged—chiefly, perhaps, that of science, owing to its strict limitation to two years. Meanwhile, the claims of clinical medicine are paramount; but whilst this subject has become enormously expanded the time allotted to its study has been relatively reduced. The consequences were to be foreseen. They are the clinical laboratory with its cry for still more science, and the post-graduate system with its cry for still more clinics.

All the remedies proposed are too radical for immediate application. To reduce further the number of subjects is a policy not much in keeping with modern developments, for the more science we get so much the better, so long as it is useful science, whilst clinical training can never be awarded too much time. Again, we cannot contemplate any further extension of the period of study. Five years of professional training is the fourteenth part of a man's life and should be enough for any profession. Therefore, without any prolongation we shall have to provide time for the study of the *new* sciences to come and for their ever-increasing clinical applications. Three indications lie before us: (1) to unload the science curriculum; (2) to make an earlier clinical beginning by introducing a new subject, that of "clinical technique," and a new laboratory—the "clinical laboratory"—as a link between clinical medicine and anatomy and physiology; and (3) to extend higher science training into the later years of the curriculum.

UNLOADING THE SCIENCE CURRICULUM.

The best means of unloading the curriculum are probably the following: (1) redistribution in the order of the subjects and in the time arrangements; (2) condensation in the teaching; and (3) specialisation in the selection of the subjects; and all three may need to be combined. The most effectual relief would be to transplant some of the subjects either into the period of schooling or into the clinical period.

Redistribution in the order of the subjects and in the time arrangements.—Much would be gained if suitable subjects, such as chemistry and biology, could be disposed of prior to the matriculation. The selection of medicine as a career would have to be made at an earlier age with a view to a special course of study during the later years of school education. We have before us the example of the training for the Royal navy. Our medical training, also, is sufficiently different from all others to deserve an unusually early beginning, whilst any special preparation received on a mistaken vocation would not in this instance warp the habits or the mind, but would prove to be an admirable foundation for any other career, including even the clerical. Moreover, school specialisation would soon reveal natural aptitudes or their absence, with ample time for any change of line. This "school-science" might prove to be the hitherto unprovided equivalent for a classical education, because of greater value than a course in foreign languages. Any foreign literature likely to be of use to the majority of practitioners is now translated and soon available, and the conversational need practically does not arise in this sea-girt land. Foreign languages are a luxury, but their acquisition should be economical and properly belongs to the dame-school period, or later to the business of a short educational stay abroad. If some such provision could be made for an early science training, largely practical, prior to the matriculation, 18 months might perhaps be sufficient time for a modified and condensed course of anatomy and physiology. And this brings us to the second of the remedies suggested.

Condensation in the teaching.—In all the preliminary subjects some of the more theoretical details might be eliminated without serious loss to the general educational purpose. In the case of anatomy and physiology specialisation would be a more correct term, as the modification to which I refer would consist in adapting the teaching more closely to the practical needs of medicine and surgery and in condensing the more theoretical portions. The relief thus obtained might mitigate the prevailing dread lest any clinical impressions should disturb the fine balance of examination fitness in the preliminary subjects. It is, indeed, much to be desired, though hardly possible, that the student might approach the study of his physiology with undergraduate strength and memory but somewhat in the spirit of a post-graduate.

Specialisation in the selection of the subjects.—This is also applicable to the later years of study, when increasingly clinical uses are now found for our scientific training; and this rather suggests a shifting of some parts of the science

subjects—viz., of those parts which have an essentially clinical purpose—into the third and fourth years. This would be a step towards associating, instead of dissociating, practical clinical and scientific work, as the higher science training outgrows the narrow compartment of the preliminary curriculum. For instance, the clinical part of physiological chemistry and the study of the blood might be included with other subjects in the course on clinical technique, so that in the future perhaps such terms might be used as "elementary and advanced clinical physiology." Changes as great as this have taken place, and yet greater changes must come. A course of higher applied physiology in the fourth year would tally with the advanced teaching of anatomy in connexion with operative surgery. There is some anomaly in placing before mere tyros the most advanced problems while such simple practical physiology as the auscultation of respiratory and cardiac sounds or the viewing of the fundus oculi or of the trachea is thought too great a departure from the theoretical subjects. As regards anatomy, so much laborious knowledge is now quickly lost and unutilised that there would be no detriment in the first instalment being reduced on strictly utilitarian lines and this working minimum gradually added to during subsequent years and developed mainly in the clinical directions of visceral medical anatomy and of operative surgery. On some such plan a portion of the burden of the first two years might be shifted, school bearing part of the responsibility of chemistry and biology and the later years that of advanced anatomy and physiology, and in this way the professional training itself might possibly begin in the second year, whilst from the beginning the faculty of observation would be trained in those fields where it will be engaged in practice. None of you will have the benefit of these changes, but their mention may have provided you with clearer ideas and, perhaps, with some suggestions as to the most profitable way of looking at your studies. It is the study which is preliminary, not the subjects, for anatomy is part of clinical medicine and physiology is its very breath. The distinction between their educational and their utilitarian side is one which no teacher of a special branch would care in fairness to the integrity of his subject to emphasise too strongly but which is essential from your standpoint. Some of the superabundant supply will be retained and will help to educate the clinical man, but the greater part is sure to be lost to conscious memory. Inquire of your fellow-pupils and of your teachers which are those portions of your daily anatomy and physiology which are to form part of your professional outfit and to be kept ready for use. Let your study of visceral anatomy and physiology, and above all of practical urology, hæmology, and glandular physiology be undertaken and carried out with the care and forethought which belong to the safe keeping and to the utilisation of capital. Meanwhile, any premature attempt to take any part in clinical work or to visit the wards is futile and detrimental. But a distant message of advice may harmlessly be sent from them to you whilst you linger in the Eden of science, and it is this: see to it that the precious fruit you are gathering does not run to waste and your scientific weapons do not rust before the time when they will be wanted.

A NEW SUBJECT: CLINICAL TECHNIQUE.

The ancient and mediæval artists made and mixed their own colours. This was a purely technical operation which might, so far as the successful painting was concerned, have been done at a distance. So it is with many other points in the technique of all arts. Clinical technique, though it is unrecognised in the curriculum, has now grown into a full-sized subject comprising regional anatomy, important parts of practical physiology, of physiological chemistry, of histology, and of bacteriology, in addition to the entire technical detail of physical examination, to medical terminology, and to systematic note-taking. The accessory clinical methods and apparatus are now becoming so numerous that it is difficult in the wards to apply them all even in the service of the patients, much less for the individual teaching of students. This tuition should largely be conducted elsewhere and its proper place is a special laboratory. Nowhere really at home, and everywhere inevitably an intruder, in the dissecting-room, in the chemical, the physical, the physiological and the bacteriological laboratories, and above all in the wards themselves, clinical technique has hitherto led a wandering and parasitic existence. Clinical medicine and its students will not have had their due until all the *disjecta membra* indispensable to their work shall have been consolidated into a working whole and duly housed in a laboratory furnished with all the material, apparatus, and diagrams essential to a thorough and rapid grasp of the entire subject. I believe that the practical study of science and that of clinical medicine have been kept too much separated, and I cannot view without misgiving any prospect such as is now being discussed of rendering that separation absolute in space as well as in time. In my opinion the solution which is sought lies in an opposite direction. The delay which has occurred is but a repetition of previous experiences. Laboratories of research in chemistry and in physiology had existed long before educational laboratories were instituted for the benefit of students of medicine. In the same way the teaching of clinical technique, the only variety of practical science work which is in daily use by the practitioner, will be the last to be duly provided for. My proposal is that the practical subjects which belong to clinical technique be grouped in the curriculum after the preliminary and before the clinical period of training and taught practically in connexion with a clinical laboratory. A fundamental advantage would accrue in respect of the science curriculum. At present much which practically belongs to clinical medicine is taught under the science schedule without any point of contact with its clinical purpose; lost among a mass of less indispensable theoretical knowledge it overloads the memory for a time and is quickly forgotten. This practical matter needs to be taught at the time when it is put into use; or it should be identified with clinical use at the time when it is taught. A practical course on "clinical technique" dealing with "clinical physiology" and "clinical anatomy" would imply neither additions to the schedule nor any change in the educational periods, but only a trifling redistribution in the subjects. The latter, for instance, would still be taught in the second half of the second year; but the students would have passed from the stage of "preliminary" to that of "applied" science, or clinical technique. The indispensable basis of this scheme would be practical tuition and practical work in a clinical laboratory.

In this century, which bids fair to be the century of medicine as the last was the century of surgery, the clinical laboratory is likely to become one of the most important educational levers. A complete clinical laboratory is a combination of the chemical, physical, physiological, bacteriological, and pathological laboratories brought into working relation with the wards. The clinical laboratory of research in the service of pure science and the ward clinical laboratory in the service of practical hospital treatment have already been inaugurated. But there is a third variety still wanting, though not less important—the students' clinical laboratory. Many students still fail to obtain that expert familiarity with the physical and chemical methods of examination which is to be expected of them. They have been well taught, but they have not practised enough for themselves for the want of systematic opportunities in suitable surroundings. The wards and the out-patient room afford admirable opportunities for the study of morbid physical signs, but these chances are, in my opinion, too casual and precarious for a systematic demonstration and rehearsal of the methods themselves. A place is needed for the unhampered tuition and practice of the methods and apparatus. Whereas anatomy, physiology, chemistry, and pathology all possess their individual sanctum, the most important of all our applied sciences, clinical medicine, has no place to call its own. This defect may sooner or later be realised, and every school may ultimately possess a students' clinical laboratory, where the science student and the clinical worker might meet on common ground, the first in the pursuit of his scientific studies, the other because of his clinical reference to science. Without stepping beyond the school precincts or the boundaries of his own subjects, the junior student would learn that his senior from the wards was applying precisely those chemical tests and instrumental manipulations which he himself was learning, and he would take note that they should not be forgotten. A laboratory of this kind, the student's own test-room, under suitable junior tutorship, might with advantage be utilised for the teaching and practice of the professionally useful aspects of physiology and of physiological chemistry. For instance, the blood, urine, and digestion tests might be taught and practised there, and a practical familiarity with the respiratory and cardiac sounds acquired with the help of a living subject in attendance. The theory of the stethoscope itself and of percussion might readily be explained, and much other

clinical information facilitated by reference to the diagrams and apparatus belonging to the laboratory.

With the dissecting room the clinical laboratory would be in close sympathy. Medical and surgical anatomy, prominent requirements of the later examinations, would be represented by casts or diagrams, and on doubtful points of visceral anatomy frequent reference would be made to the post-mortem room. The existence of a clinical laboratory of this sort would go far to animate with a clinical purpose much of the work of the first two years, and the helplessness of clinical beginnings, imperfectly met by the course of practical medicine, might be more quickly remedied.

THE CLINICAL CURRICULUM AND THE CLINICAL CLERKSHIP.

In the clinical curriculum no sweeping change has been made. The clerkships which existed 100 years ago have been continued, and beyond the requirement of a minimum period of six months no definite regulations have been imposed from above. Meanwhile the spirit of clinical medicine, its needs, and its weapons, have altered *toto cœlo*. But the extent to which the individual student's time has been adapted to the altered requirement has varied much with local traditions and immediate surroundings. Some of our schools have wisely relegated the clerkship to the fourth year and enforced a preliminary technical training during the third year. At others, less happily, the clerk's attendance sheet may be signed up quite irrespective of his clinical standing. Walking the wards, whilst always profitable, is, clinically speaking, a passive function. Active practical work, of which there is always plenty to be done in collaboration with those in office, is the work which will secure your success at examinations and in practice. It should be begun without a day's delay and carried on to the end of your hospital days, but it needs to be systematic.

The highest form of practical work is the advanced clinical clerkship—a fact not always recognised by the pupil until he returns to clinical study as a post-graduate. The clerkship is the golden time of clinical training which makes the physician. Doubtless it furnishes the beginner with material to learn how to use a stethoscope, how to percuss, how to test urine, and how to write out a clinical report. But the clinician is not to be made at this rate, unless the clerkship should be continued for double the period. Do not throw away your valuable time of clerking upon an elementary mechanical training which should have been acquired previously in the wards and in the laboratory. Some confusion seems still to be made between the purposes served by the ancient clerkship and by the modern clerkship respectively.

The ancient clerkship.—The ancient clerkship was analogous to the apprenticeship which it replaced, a school for professional ways and phraseology, for simple observations and theories rather than chemical and instrumental investigations. For this no time could be too early and the student was made to plunge *in medias res* without any further preparation.

The modern clerkship.—The modern clerkship is totally different. I see in it an official appointment of dignity and importance with valuable prerogatives which come next to those of a junior officer. The clerkship is for most students the only direct apprenticeship to actual charge of patients except the brief period of obstetric experience which falls to the lot of all. This ought to be, if it is not in every case, the practical value of the appointment to the clerk. The clerk's official privilege is that of daily examinations and inquiry, which alone teach him to judge at a glance of the patient's progress. His professional experience grows at a rapid rate, in proportion as he is capable of independent action. Much of all this is lost to the unequipped tyro. He ripens for his office just when it is time to retire.

The junior and the senior clerkships.—The essential difference between the elementary and the advanced or finishing period of ward work might be identified with two grades of office, a junior clerkship under the house physician or the medical tutor, and a senior clerkship under the physician. The first of these could hardly be held too early, the latter could hardly be taken too late. The whole interval between them would then become for the fully-equipped student one of clinical profit whether from book work, from lectures, or from walking the wards. Much of the junior clerk's time would be spent in the out-patient room and in the wards, where he would take systematic daily notes of easy cases offering good opportunities for the physical examination of normal organs and for practising instrumental methods such as the sphygmograph, the cardiograph, and others. Much time also would be spent in the laboratory, in microscopical examinations, and in chemical testing. Lastly, as a finishing touch to his professional training would come the senior clerkship with its wealth of opportunities limited only by the relative fitness of the worker. In terms of art these periods correspond to two studies—that of technique and that of production. Your work of art is to be the investigation of disease and its treatment, and your studio is the ward during the period of clinical clerkship. But success in the performance cannot be attained without a preliminary technical preparation, although, much to your detriment, the regulations admit of your making the attempt.

Examination in clinical technique.—The educational authorities have chiefly laboured at introducing and elaborating the modern scientific curriculum; clinical education, which had always existed, has been left to take care of itself, but it needs to be more thoroughly organised. The all-important subject of clinical technique has never received any separate official recognition either in schedule or in examination. Not a lover of examinations, I regard a technical clinical examination to be held some time in the third year as a necessary and a merciful evil, since, unlike others, it would not merely test the ephemeral possession of a limited number of established facts but the lasting command of an unlimited supply of personal observations. Its scope would be sufficiently large without implying the slightest addition to that which is already taught, since it would embrace the use of physiological instruments applicable to clinical study, and of purely clinical instruments, the elements of physiological chemistry, visceral anatomy, including surface markings, the technicalities of medical terminology, and, last but not least, the systematic note-taking to which I shall presently refer. The best mode of qualifying for this practical examination would be practical work in a clinical laboratory such as I shall proceed to describe.

Gentlemen beginning your third year, the practical point which arises out of this survey is that you should anticipate by your combined efforts some of the advantages which may not be yet offered to you. Practise your clinical technique among yourselves by twos and by threes, and for this the best place of meeting is not the ward, but wherever you find the necessary freedom and quiet. Discuss your clinical subjects just as you have met and discussed your anatomy. For the present your clinical laboratory work must be peripatetic, and doubtless you will be welcome to use in succession for your private study the various science laboratories of your school.

Gentlemen in your second year, help each other with the acquisition of knowledge and test each other as to its clearness and retention. Set still greater value upon your practical work in connexion with its clinical purpose. Bear in mind the professional uses of trained experimentation, of dexterity in manipulation, and of most of your physiological tests. Allow nothing of your knowledge of the functions and of the secretions to slip. Then, as to the early familiarity with auscultation and percussion, failing a *corpus vile* to practise upon in a clinical laboratory you have the willing offices of each other to investigate the practical physiology of respiration and of the heart's action with the stethoscope, of the pulse with the sphygmograph, and of the visceral anatomy by rough percussion; and you will always find a willing senior pupil to help you with your first attempts or with any needful explanation. In my belief these useful pastimes are not likely to detract from your devotion to your set subjects or to endanger your examinations, but, on the contrary, would add meaning and zest to your studies.

CLINICAL NOTES AND THEIR VARIETIES.

In note-taking there are two departments—the recording of your own observations which are systematic, and that of the patient's statements which are often a mass of confusion. To meet this difficulty let your inquiry be so far as possible quantitative—e.g., as to dates, frequencies, amounts, &c. Figures are most convenient if trustworthy, and they show up at once any contradictory statements. The patient as he appears before you often carries his diagnosis written large in his aspect; but if this should not suffice as a guide two simple questions help to identify the condition as acute or chronic: (1) How long has the patient been in bed or incapacitated?; and (2) In what part of the body is the

chief pain, discomfort, or disability? Too much value cannot be attached to the diagnostic importance of pain as a safe indication of something wrong, and often of the nature of the disturbance. Your further investigation will be guided by your acquaintance with the disease. Clerking thus becomes a direct incentive to reading, which at once widens your inquiry. You become an observer and you begin to read disease at sight. For this daily visits and examinations are necessary in your acute and rapidly varying cases; but in all cases continuous observations are wanted. In each case there is some clinical incident which works through vicissitudes to a final *dénouement*. *Respice finem.* You must be there at the finish—the point in the clinical record lies in the conclusion.

There are three kinds of clinical notes, each suited to a different purpose. The academical or full report notes are essentially educational. For the purposes of strict clinical study a much shorter style is required; these are the short, practical, clinical notes. Lastly, there is the memorandum note, note-taking reduced to its simplest expression—*multum in parvo*. To report a case fully and in academical style is a lengthy and laborious task, yet indispensable as a training to accuracy and thoroughness. All the facts of the case, including the negative facts, are stated almost as fully as in a legal document. I conceive no more profitable introduction to ward work than a progressive course of clinical histories, one to be taken every day till the necessary facility is acquired. This is one of the most important exercises in clinical technique.

Advanced clinical notes.—These are not, like the full reports, almost photographic in their completeness and lack of perspective. There is in them less writing and more point. And yet they tell us more than the other reports, but largely by implication—much of the inquiry being expressed merely in the conclusion arrived at, in direct statements duly tested, and in hard facts. This kind of note can only be expected from those highly trained in clinical and scientific observation who need no longer record each step in the examination, and it is the style of note-taking that can best serve your laborious clinical studies.

The condensed system of note-taking.—In carrying this out the official reporting style in two degrees answers best. Rough notes are unwieldy and often unreadable. Abstracted from the pocket-book a condensed note saves much useless writing and big facts are not buried. In short, learn to be searching in the inquiry but selective in the record—observers of many facts but writers of few. For a coming generation shorthand may be one of the conditions of existence. In connexion with clinical medicine it has already been sufficiently advocated. Its inclusion among the subjects for matriculation would be vastly more important than that of any foreign language. Many systems and forms have been suggested for note-taking; intended to save labour they sometimes fail to do so, and on the whole it is better perhaps to have *carte blanche* and to carry out consistently one's own system. The temperature chart, which carries much of the essential information in figures, often serves as a single sheet record in acute cases of short duration when not so complicated as to call for more space. Short methods such as these enable clerks to keep simultaneous reports of several cases, and six months of this kind of work would provide them with experience and records of a good assortment of diseases. Yet further opportunities are given by a denser form of notes, perhaps the only one possible in the hurry of practice—viz., the retrospective or *résumé* note.

Résumé notes.—These are not much more than headings descriptive of the striking peculiarities of cases. This form of note will teach you concentration and grasp of a case, and later in practice rapidity of perception and of action irrespective of minute disquisitions which obscure the real issue and often ruin diagnosis. Since one or two copies can be quickly obtained by the perforation method a mutual arrangement would enable each of you to obtain memorandum charts of those cases which have been allotted to your fellow clerks, but which may have been seen and examined by you day by day. This part of your valuable experience would in this way be added to your permanent records and your clerkship would provide you with a considerable series of personally observed cases with their illustrative curves.

THE STUDENT AND HIS WORK.

Self-help.—I should like to be able to offer to you as students a few words of practical advice and encouragement. Pure art, we are all aware, needs special gifts. *Nascitur non fit* is true, not only of the poet, but also true of the physician, who has to be all things to all men and whose knowledge of disease is in vain if he lacks the knowledge of man. Nevertheless, there is probably no profession in which persevering labour so safely brings its reward. Self-denial and hard work are infinitely more essential than great talents. Let us who may be relatively less gifted, then, take comfort in the thought that our privilege is to work, and, working, learn to the end of our days. Success in every line of life belongs to a single-minded attention to the business in hand and to those great economisers of labour, punctuality and a daily settling up of the work of each day.

Mutual help.—Much help also comes from combination. Collaboration in study, as, later, consultations over difficult cases, affords a multiplication not only of forces but of their directions. Individual divergences of thought are brought to bear, and even our relative defects may lead to profit if they should elicit greater work from our differently gifted associates. I can picture to myself the draughtsman among you helping the musician with his diagrams and in return receiving his assistance over the mysteries of percussion.

Self-education.—The line for special attention is always tha of the least aptitude. The easier performances will profit by he effort. But the lame function, if it be neglected, becomes relatively weaker from disuse. Let me name as an instance the most essential of collateral studies—that of drawing. To be unable to draw is to lack the use of a sense which is of primary importance to the medical student. The time, I hope, may soon come when drawing will be regarded as one of the most important subjects in the entrance examination. But it is after all only one of the practical subjects in which the pupil has to practise self-education.

Technical self-education and the training of the senses.—Both sets of faculties, the physical and the mental, need to be trained. The examining board looks after your intellects, it is for you to look after your senses. The average student devotes hardly sufficient time to improving his mechanical experience. It is said of Paganini that much of his technique was evolved by his individual efforts; and other great artists have achieved perfection by solitary study. But the study of art is facilitated when, as at the Royal Academy of Music, technique has a local home and habitation, with its teachers and its pupils, its demonstration and its practice, and, above all, the necessary technical appliances, luxuries which the clinical student of the future may likewise enjoy. Meanwhile you are dependent upon your individual industry. Proficiency in auscultation and percussion, as in instrumental music, needs long practice. This is a reason for making an early attempt in this direction. The use of the ophthalmoscope is a physiological recreation which taken early would also be of great advantage, and the same is true of the sphygmograph and of other physiological instruments essential to clinical investigations.

Taste.—The exercise of taste is generally restricted to the appreciation of the medicine we order, a practice much to be recommended to prescribers.

Touch.—Touch, one of the most helpful of our senses for clinical work, is perpetually under training in early life, but improves by systematic education, as in the cultivation of some of the arts, and by the endeavour to train both hands.

Hearing.—The ear has wide scope in the study of auscultation and percussion. Immediate auscultation has its use in some cases. Great importance attaches to the student being taught the use of the simple rigid stethoscope before he is allowed to touch the binaural. This latter is less reliable by reason of its complexity and of its mode of conduction.

Sight.—Sight hardly needs specialised cultivation. But it is possible to see and yet fail to perceive. Accuracy in visual judgments and examinations is a matter for constant practice; and I may mention the practical rule essential to diagnosis, that of not standing in your own light but of placing the patient in it.

Smell.—Our sense of smell, trained by use rather than by system, is far inferior in critical power to that of the dog, who assiduously practises this sense, although in a different sphere. His speciality is the animal kingdom. Most of us are familiar with the smell of *genus homo* and of most animal tribes; and, as Shakespeare has it, we may even distinguish a nationality:

> "His word was still,—Fie, foh, and fum,
> I smell the blood of a British man."
> —*King Lear*, Act III., sc. iv.

But the dog can tell us not only the species but the individual. The almost inconceivable efficiency to which this gift is educated is the result of constant study. The canine mind and memory must be largely aromatic or made up of fragrancies. We humans are on a much lower platform, but such as they are our powers should be utilised, for diagnosis sometimes depends upon their exercise. To say nothing of epiphytic and epizoic odours, such as those of favus, phtheiriasis, &c., typhus and small-pox and some other diseases can be identified by the smell of the patient. The smells characteristic of phthisis, rheumatic fever, &c., are probably a mixed product, due less to the micro-organisms than to the excretions. Bad smells are becoming scarce, particularly in hospitals, but greater importance attaches to the examination of (1) the secretions and of (2) the patients, and this duty must be faced where patients' lives are at stake.

The secretions.—An inspection of the fæces is not neglected by physicians, but other secretions are more accessible to students. The urine, which may smell of diabetes, of alkaline or acid decomposition and other fermentations and of various ingesta, is usually reserved for our examination. The smell of the vomit, a guide to the detection of volatile poisons and ingesta, such as alcohol, may also be the means of identifying the seat of disease. Life and death have often turned upon the question whether the smell of the vomit was stercoraceous. The examination of the sputum is also of daily and practical importance. Here, again, the difficulty is to procure it in its original septic state.

The patient.—As regards the patient, the most essential of our olfactory examinations of patients concern the nose, the mouth, and the ears. Most vital conclusions are sometimes based upon the septic smell detected in the ears of infants and young children; and the neglect of this examination may cost the child's life. A heavy, foul breath seldom escapes recognition, but we should in every case localise its origin by examining the patient's breath alternately whilst the mouth or the nose are closed. Often the smell is from the nose, as in ozæna and dry fœtid catarrh; and unless recognised this may escape its proper treatment. The mouth is the most fertile source of distinctive smells, such as the respiratory effluvia in bronchiectasis or gangrene and other conditions, but most of the bad odours are of local production. Foremost as frequent causes of disease are dental caries and degeneration, as well as the fœtid conditions of the gum found in hæmorrhagic stomatitis, in pyorrhœa, and in gangrene. Follicular fœtid tonsillitis and various conditions of the retro-nasal fossæ have also to be accounted for. Putting all this aside, the breath is of vital diagnostic importance in diabetes and in uræmia, and patients with chronic disease should always be examined in that direction.

In conclusion, the subject of this address has hardly received full justice at my hands or much literary ornament. I came to you less prepared for an academical function than to talk as a student to students, to suggest some of those special hints which veterans often have to offer, and to discuss with you with the advantage of some slight experience your plan of campaign. May I have been so fortunate as to adapt my remarks to my audience and to their practical aims and to have in some measure fulfilled my intention to direct their whole-hearted attention to the every-day trivialities of clinical study and their thoughts sometimes also to the higher ideals of the art.

A FURTHER NOTE CONCERNING THE FRONTAL OR SUPRA-ORBITAL REFLEX.

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REFERENCE was made in an annotation in THE LANCET last year[1] to the facial or supra-orbital reflex and a summary was given of the recent researches of two observers—McCarthy and Hudsvernig. I cannot refer to the *Neurologisches Centralblatt* for a full account of their work, but I may state that I first described this reflex in 1896[2] under the name of "frontal" and demonstrated it to medical friends as far back as in 1889. In this communication I indicated the reflexogenous area and came to the conclusion that it was a true skin reflex inasmuch as mere stroking of the skin is sufficient to evoke a response when the latter is in a condition of hyperæsthesia. McCarthy's statement that division of the supra-orbital nerve abolishes the signal corroborates this view. Further observation, however, has taught me that it is not only the supra-orbital but also the cutaneous and periosteal terminal twigs of the supra-trochlear, infra-trochlear, nasal, and lacrymal, in fact, *all* the end branches of the ophthalmic nerve, which are concerned. In other words, tapping of the nose (nasal) with the eyelids closed, of the inner surface of the nose and the eyebrow near the inner canthus (supra- and infra-trochlear), and of the external angular process of the frontal bone (lacrymal) is able to produce the movement. The terms "supra-orbital" and "frontal" as applied to the reflex are, therefore, inappropriate. Moreover, the term "facial" is still less accurate, since there are *several* reflexes (as the corneal and the lacrymal) which occur in connexion with the facial nerve and the face. There is one reflex in this region which has apparently escaped description—namely, an *aural* reflex which may be induced occasionally by stroking gently and quickly downwards the skin (supplied by the auriculo-temporal nerve) in front of the ear in young infants. After a little patience and perseverance the ear may be suddenly elevated—a result due to contraction of the attollens aurem which is supplied by the small occipital nerve. It seems to be a true skin reflex and identical with that which is more easily obtained in some of the lower mammalia. This reflex, moreover, obviously belongs to the area of the face.[3] The term "facial" is consequently unsuitable and I propose that of "ophthalmic" as being more in accordance with its distribution.

In my former paper I expressed the conviction that the sign was not due to the communication of physical vibrations, since the area was most definite. Hudsvernig, however, proposes the cumbersome view that "it is an overflow of the muscular irritability to mechanical irritation into neighbouring muscles innervated by the same nerve," and is led to the theory because he has found that the contraction may be obtained on both sides after the right Gasserian ganglion has been removed. I have no opportunity of testing his statement, but before accepting his explanation the exact conditions and relations under which the signal is provoked must be carefully and thoroughly investigated. Moreover, granting the fact, another explanation is feasible. If the cornea near the external canthus of the *right* eye be gently touched or the eye-lashes pulled a twitch in a certain part of the lower *left* eyelid may be observed to accompany the movement in the right eye. Furthermore, a contraction of the same strand of fibres in the left eyelid may be subsequently and immediately provoked by tapping the right external angular process. It is difficult to conceive how the overflow could leap the bridge of the nose and make itself felt just in the same muscular fibres on the opposite side. As ordinarily demonstrated by a tap of the finger with the eyelids gently closed, I believe it is a periosteal reflex induced from the pericranium and periosteum supplied by the terminal twigs of the ophthalmic nerve, with a reflex centre corresponding to that of the corneal reflex in the medulla. I drew attention to the fact that in chorea and supra-orbital neuralgia the movement may be produced by tapping the head as far back as the parietal eminence. A similar distribution is often seen in hysteria. The reflex is absent in chloroform narcosis and in facial paralysis. I have found it difficult to obtain in paralysis agitans. In a patient with hemiplegia and hemianæsthesia it was absent on the paralysed side for several days after the attack, but when the skin of the normal half of the forehead was tapped *both* orbiculares could easily be made to respond.

My object in writing this note is to call attention to the more exact designation "ophthalmic" and to emphasise the view that the signal is a true reflex and obtainable from both the skin and the periosteum supplied by that nerve.

Clacton-on-Sea.

[1] THE LANCET, Nov. 30th, 1901, p. 1513.

[2] Preliminary Note on a New Cranial Reflex, THE LANCET, March 7th, 1896, p. 619.

[3] The aural reflex is most easily obtained in adults by tickling with a blunt-pointed instrument the skin of the external auditory meatus just opposite the tragus. The *opposite* ear, as a rule, is also elevated.

BRISTOL MEDICAL CHARITIES.—During 1901 the employés of Messrs. J. S. Fry and Sons collected £565 for the various Bristol medical charities.

CASE OF RECENT TRAUMATIC PERINEAL DISLOCATION OF THE RIGHT HIP WITH A DISSECTION OF THE JOINT.

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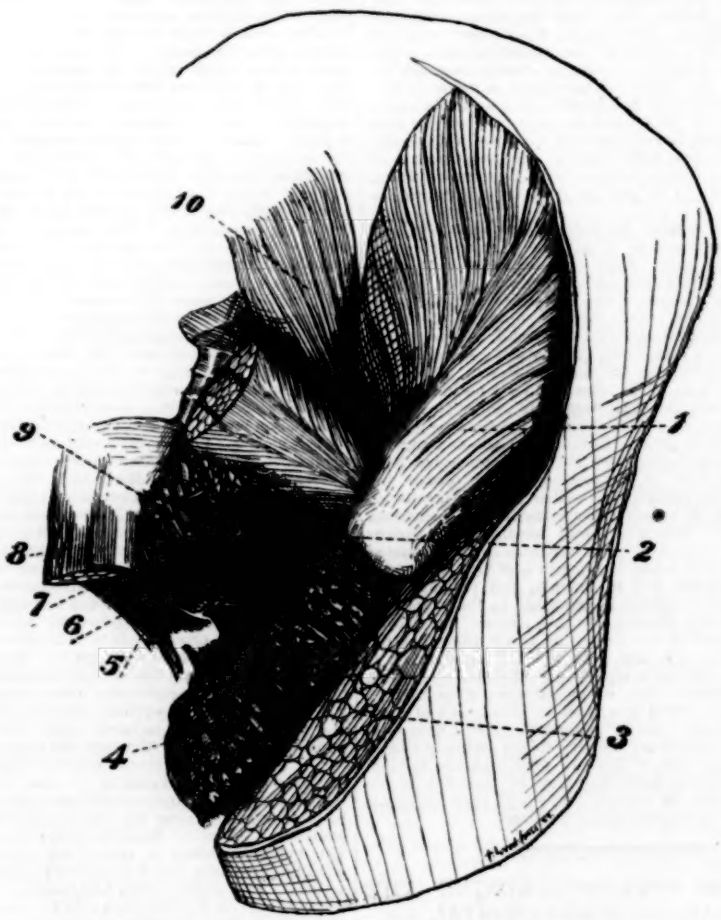
DURING May, 1901, two cases of dislocation of the right hip were admitted to the Poplar Hospital. The first was under the care of my colleague, Mr. A. B. Roxburgh. Both were cases of perineal dislocation of the right hip-joint, both were in young, powerful men, and both presented practically the same physical signs and symptoms. In the first case (Mr. Roxburgh's) reduction of the dislocation was easy and recovery was uneventful; in my case, unfortunately, death suddenly took place a few minutes after an easy reduction under anæsthesia. The following are the notes of my case. The drawings, made by Mr. Wood Jones of the London Hospital, show the condition of the joint 24 hours after death.

A man, aged 23 years, was working in the hold of a ship in the docks. He was engaged in hoisting up bales of wool. For some reason the claws which grasp each side of the bale became unhitched. One of them struck the deceased on the left side of the face and simultaneously the bale of wool fell on the right thigh. It was impossible to find out how the deceased was actually standing at the time of the accident, but apparently the bale struck the right femur on its antero-external aspect, somewhere about the middle of the shaft. On admission to hospital there were an abrasion on the left cheek and two small wounds on the left side of the forehead. The right leg was flexed, abducted, and slightly rotated outwards. The amount of flexion was roughly an angle of about 30° with the horizontal and the amount of abduction was about 40° with the sagittal plane. The leg was kept firmly fixed in this position and any attempts at movement, either active or passive, caused much pain. There was lengthening to the extent of one inch on the affected side by spino-malleolar measurement. The great trochanter was buried and there were distinct flattening and broadening of the right buttock. A swelling which proved to be the head of the femur could be made out in the perineum. The adductors were tense and prominent, as was also the lower part of the gluteal mass. The patient was a man of very powerful build, the glutei and all the thigh muscles being exceptionally well developed. A diagnosis of perineal dislocation of the hip was made and reduction was proceeded with. Chloroform was administered. The right leg

FIG. 1.

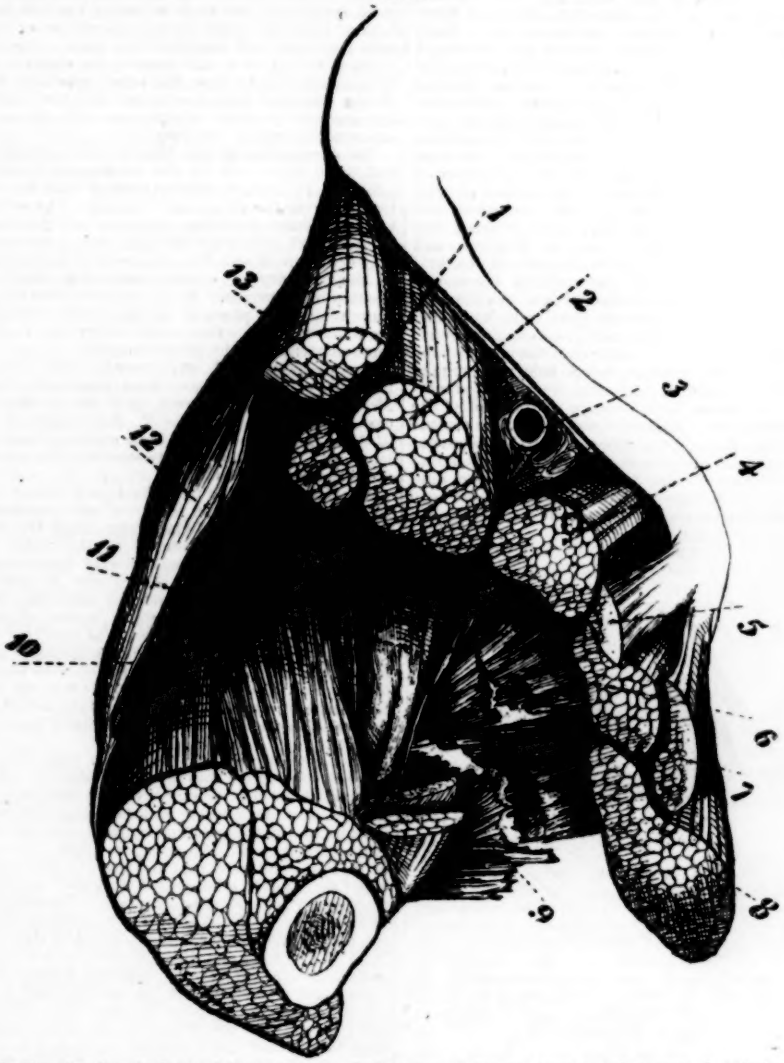


View of the dissection from behind. 1, Gluteus medius. 2, Obturator externus (torn). 3, Gluteus maximus. 4, Quadratus femoris (torn). 5, Obturator externus (torn). 6, Head of femur. 7, Edge of acetabulum. 8, Origin of hamstrings. 9, Quadratus femoris (torn). 10, Pyriformis.

was then well flexed on the trunk, adducted, and rotated in, very little force being used. The head of the femur immediately slipped into the position of a dorsal dislocation. The leg was next abducted, rotated out, and extended. Reduction followed without any difficulty. A long Liston splint was being fixed on the limb when the patient suddenly stopped breathing, and although every available means of resuscitation were tried they proved ineffectual.

At the post-mortem examination nothing was found to account for death; all the organs were healthy and no signs of embolism were found anywhere. On superficial inspection of the right hip there was nothing to indicate that a recent dislocation had occurred—no bruising or undue swelling about the joint. The following were the conditions seen on dissecting the joint. 1. From behind (see Fig. 1). On reflecting the gluteus maximus, which was intact, and turning back the fascia on its deep surface, a large extravasation of blood was found. This extended from one and a half inches above the upper border of the ischial tuberosity to just below the lower border of the gluteus maximus. The walls of the bursa situated over the great trochanter were infiltrated with blood. The great sciatic nerve was divided high up, the external popliteal passing through the fibres of the pyriformis. The nerves lay on the posterior wall of a cavity containing blood and bruised and torn tissue. The nerves themselves were not torn although deeply stained with blood. The sciatic artery and its main branches were intact, but the vein and those accompanying the arteries forming the crucial and digital anastomoses were extensively torn. The gluteus medius and pyriformis were intact. The gemellus superior and obturator internus showed no injury, but the gemellus inferior, though untorn, was stretched and bruised, especially on its anterior surface. The obturator externus and quadratus femoris muscles were most damaged. The tendon of the obturator externus was split, the lower fibres remaining intact, but the upper were torn in two and the fleshy fibres partly turned within the acetabulum and caught between the edge of the torn capsule and the neck of the femur. The quadratus

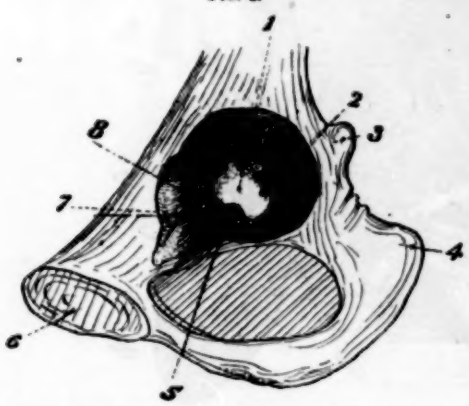
FIG. 2.



View of the dissection from in front. 1, Rectus femoris. 2, Ilio-psoas. 3, Femoral vessels. 4, Pectineus. 5, Adductor longus. 6, Obturator externus. 7, Gracilis. 8, Adductor magnus. 9, Quadratus femoris (torn). 10, Vastus externus (torn). 11, Ligament of Bigelow. 12, Tensor vaginæ femoris. 13, Sartorius.

femoris was torn right across as if cut with a knife, except for a few fibres at its lower edge (4 in Fig. 1). On separating the torn fibres of these two muscles a view of the back of the capsule was obtained. The back of the head and neck of the femur and the posterior surface of the acetabulum were exposed through a window torn in the capsule at the bottom of the cavity. The torn edge of the capsule was seen at the upper and outer part, extending from the acetabular margin to the upper end of the digital fossa. Beneath this free margin some fibres of the external obturator muscle had been caught, probably during the reduction of the dislocation; the cotyloid ligament and the edge of the acetabulum were apparently intact. The retinacula of the capsule were seen on the posterior surface of the neck; three or four of these had been stripped off the bone. 2. Dissection from in front (Fig. 2). The sartorius muscle was entire, as was also the rectus femoris; these two muscles were next cut through and turned up. Much extravasation of blood was apparent between the insertion of the rectus, vastus externus, hamstrings, and outer surface of the iliacus muscle. The upper fibres of the vastus externus were seen to be torn through at their attachment to the front of the base of the great trochanter as low down as the level of a line drawn transversely through the small trochanter. The adductor longus was found to be intact. Between the psoas and adductor brevis there was extravasation of blood, probably from small branches of the internal circumflex artery and vein. The fibres of the psoas, pectineus, and adductor brevis muscles were untorn; some bruising was found on the under surface of the pectineus. The psoas and iliacus were reflected upwards to display the ilio-femoral ligament; this was quite entire. The adductor brevis was next divided so as to expose the obturator externus from the front (6 in Fig. 2). Its upper part was found to be intact and the two divisions of the obturator nerve had escaped injury. The lower and inner part of the muscle over the region of the cotyloid notch was torn through and a hole with ragged edges of about the size of a halfpenny became apparent. This was evidently caused by the escape of the head of the femur during dislocation. As before mentioned, the capsule was torn completely through and stripped from the acetabular edge at the lower and inner part, the bare surface extending over the posterior part of the joint. The transverse ligament could be seen intact on the outer aspect, as also could the cotyloid ligament. 3. Dissection from the pelvic

FIG. 3.



View of the joint from inside. The floor of the acetabulum has been cut away. 1, Head of femur. 2, Fibres of obturator externus. 3, Spine of ischium. 4, Tuber ischii. 5, Ligamentum teres (torn). 6, Symphysis pubis. 7, Depression for ligamentum teres. 8, Cotyloid ligament.

side (Fig. 3). This was made to show the ligamentum teres *in situ*. A piece of bone was trephined from the wall of the pelvis corresponding to the centre of the acetabular cup. The pin of the trephine was placed above and to the outer side of the ischial spine, so that the cotyloid notch and ligamentum teres might be displayed. The latter structure was found torn through and hanging freely in the joint. A portion of the deep surface of the cotyloid ligament was also found turned into the joint. On turning this back and manipulating the femur the depression on the head was easily seen with some torn fibres of the ligamentum teres attached. The acetabulum itself was apparently uninjured.

Remarks.—There can be little doubt that this case was one of those rarer forms of dislocation of the hip known as "perineal"—i.e., an exaggerated form of the infrapubic variety of forward dislocations. The head of the femur in these cases passes primarily downwards over the cotyloid notch, then downwards, inwards, and backwards on to the ascending ramus of the ischium. The almost unique opportunity afforded for examining the injured structures in this dislocation is my excuse for publishing the case. Only eight cases were found in the literature by Riedinger (quoted in Tillmanns' "Principles of Surgery"). I have been unable to find any published case of dissection of a recent dislocation of this variety, and there is no specimen of its kind in any of the London museums. Several cases of recent dorsal dislocation of the hip have been dissected and recorded from time to time, associated injuries having, as a rule, caused the death of the patient. It is instructive to note the exact condition and position of the damaged structures about the joint and to realise the amount of repair which must take place during the subsequent period of recovery.

The correctness of the diagnosis of perineal dislocation was quite borne out by the subsequent dissection of the joint. A radiograph clearly showed that the head of the femur lay in the infrapubic position. The extreme flexion and abduction and the presence of the head in the perineum all supported this diagnosis. The lengthening—viz., one inch—found by measurement is of doubtful value, as the difficulty of exactly measuring the limb in this position is apparent. As to whether true lengthening or shortening takes place in infrapubic dislocations authorities are found to differ. One would rather have expected to find some shortening in the perineal variety.

The dissections of any recent forms of forward dislocation of the hip have been remarkably few. In the *Medical Times and Gazette*, 1853, Mr. Curling[1] reported a case, as also did Professor T. Annandale in the *British Medical Journal* in 1870.[2] Both of these were thyroid dislocations. It is interesting to compare the injuries found in these two cases with mine.

Mr. Curling's case: "Blood was found extravasated between the muscles on the outer and posterior aspects of the joint and in the cellular tissue about the sheath of the sciatic nerve. The substance of the upper part of the adductor magnus and lower border of the obturator externus were much ecchymosed. There was a large rent in the front part of the capsular ligament, extending from the ilio-pectineal eminence to the upper border of the obturator externus. The ligamentum teres was torn."

Professor Annandale's case: "The obturator internus[3] was torn and portions of the muscle forced into the acetabulum, the capsular ligament was extensively torn on its inner and lower aspects, the anterior and greater part of the posterior portion of the capsule was intact. The Y ligament was also intact."

On comparing my dissection with these two cases one is immediately struck by the difference in the amount of destruction to the structures on the posterior aspect of the joint. Most text-books will be found to agree in their descriptions of thyroid and obturator dislocations with these two recorded cases. All are agreed that the capsule is torn at its lower and inner part and that the ligamentum teres is torn; also, that in all so-called "regular" dislocations the Y ligament of Bigelow remains intact. The obturator externus, and in some cases the adductor muscles, are torn to a varying extent. Professor M. Gunn (quoted in Hamilton's "Text-book on Fractures and Dislocations") states that in thyroid dislocations the superior and posterior parts of the capsule are intact and relaxed, whilst the anterior and inner parts are usually torn. Mr. Timothy Holmes,[4] in a clinical lecture in 1877, states that the pectineus adductor longus and brevis may be torn and the obturator nerve may be stretched; he, however, admitted that the paucity of dissections necessarily weakened these statements.

The mechanism of obturator infrapubic and perineal dislocations is now recognised to be as follows. Usually

[1] Medical Times and Gazette, 1853, N.S., vol. vii., p. 422.
[2] Brit. Med. Jour., Case of Thyroid Dislocation of the Hip; Dissection.
[3] ? Externus.
[4] Medical Times and Gazette, 1877, Lecture on Obturator Dislocation.

the thigh is abducted and extended, a force is then applied to the femur directly from the antero-external aspect or to the back whilst the leg is in this position—e.g., in stooping with the legs abducted. The force will tend to hyper-abduct the limb on the pelvis and so to drive the head of the femur downwards and inwards, through or over the margin of the acetabulum into the cotyloid notch. Some authorities believe that this is brought about by direct thrust, others that the *outer* edge of the acetabulum becomes opposed to the great trochanter and so forms a fulcrum of a lever, the long arm being the shaft of the femur and the short the neck and head. In my case probably the question of lever and fulcrum came chiefly into play, as the transverse ligament and edge of the acetabulum showed no signs of injury. The subsequent position of the femoral head will depend on the line of the continuing force. In this case, as we have seen, a heavy bale fell on the abducted thigh on its antero-external aspect; the head of the femur was thus forced out through the lower and inner part of the capsule and eventually came to the fore part of the perineum. With regard to the muscles torn, the obturator externus will naturally suffer most damage as it lies in close contact with the inferior and posterior surface of the neck of the femur. The quadratus femoris is generally torn in pure dorsal dislocations; in this case the complete division of this muscle is interesting.

The cause of the untoward death of my patient was obscure and the post-mortem examination threw no light on the matter; the question of anæsthesia may be discounted, as the effects had nearly passed off, the reflexes had returned, and all manipulations likely to cause shock were finished with. A similar calamity occurred under Professor Stokes of Dublin (Stimson's "Text-book of Fractures and Dislocations"). In this patient death was supposed to be due to fat embolism. It is of interest to note that the patient in the similar case preceding mine (Mr. Roxburgh's) made an uneventful recovery; he can walk with very little stiffness and flexion of the hip is nearly normal. He was also a man of powerful build, showed exactly the same physical signs of luxation, and the injuries surrounding the joint were probably similar to those found in my case.

I have to thank Dr. Clement White, my house surgeon, for notes of the case, also Mr. Jones for the drawings, and Mr. Harnack for the radiograph.

New Cavendish-street, W.

A CASE OF PULMONARY REGURGITATION.[1]

BY EDMUND CAUTLEY, M.D. CANTAB, &C.,

PHYSICIAN TO THE BELGRAVE HOSPITAL FOR CHILDREN; ASSISTANT PHYSICIAN TO THE METROPOLITAN HOSPITAL.

INCOMPETENCE of the pulmonary valves, leading to regurgitation, is rightly regarded as one of the rarest forms of valvular lesions. It is usually associated with endocarditis of the infective variety or with pulmonary stenosis. In an article on the subject by Hale White in Allbutt's "System of Medicine" the writer refers to 99 cases, verified post mortem. More than half of these were due to infective endocarditis. The chief other causes enumerated are pulmonary stenosis, abnormalities of the pulmonary valves, dilatation of the pulmonary artery, and pressure of an aortic aneurysm on the pulmonary valves. Of the 57 cases associated with infective endocarditis no obvious cause was found in 19, but in eight instances there was congenital pulmonary stenosis. As regards age, only two of these 57 cases were in children under 10 years of age, and 12 in patients between 10 and 20 years of age. The present case is an illustration of pulmonary regurgitation in a girl, aged 15 years, secondary to pulmonary stenosis, and associated with acute endocarditis of the valves.

A girl, aged 15 years, was admitted into the Metropolitan Hospital under my colleague, Dr. Oswald Browne, on May 7th, 1901, and was discharged on May 23rd. She subsequently attended my out-patient clinic and was re-admitted to the hospital under my care on August 13th, and died on Oct. 10th, 1901. As regards family history it was stated that her parents and two brothers were alive and healthy. She had lost several brothers and sisters, but none had died from rheumatic fever. Two years previously she was in the London Hospital for rheumatic fever. After this she had diphtheria and was in the fever hospital at Homerton. She had been subject to joint pains and she had worked as a feather curler. On May 7th she was admitted for headache, vomiting, and general debility, with a temperature of 103·4° F. The patient had a high colour and was well nourished; there was no clubbing of the extremities or œdema. The apex of the heart could not be localised and there was no thrill. Dulness extended to the middle of the sternum, to the third left intercostal space, to the left anterior axillary line, and down to the seventh rib. The sounds at the aortic base were clear and ringing. At the pulmonary base the first sound was clear, while following the second was a diastolic murmur conducted downwards and heard in the third and fourth left intercostal spaces close to the sternum, being loudest lower down. A systolic murmur was also heard at the apex, in the axilla and faintly behind. The pulse was 96, regular, not sudden, of fair volume, and good tension. A few moist sounds were heard at the base of the left lung. No enlargement of the liver was detected. The urine was normal. The temperature fell steadily to normal in two days. In a week she was allowed up, and on May 23rd she was sent to a convalescent home.

The patient remained in her usual health until August 13th when she complained of pain in the right knee and minute bright red spots on the legs. On coming to the hospital in the afternoon she seemed to be very ill and was admitted. Her colour was high, with a slight tendency to duskiness of the cheeks. The temperature was 101·6° and the pulse was 108, regular, and of good volume. The lungs were normal except for a few crepitations at the bases. The apex of the heart was in the sixth space in the nipple line; the impulse was not heaving. Diffused pulsation extended for from two to three inches to the right of the sternum. There was marked epigastric pulsation. There was no thrill anywhere. The first sound at the apex was rather rumbling in character. Both sounds at the base in the second right and left intercostal spaces were clear and ringing. In the third and fourth left intercostal spaces near the sternum was a diastolic murmur, increased in intensity on expiration and in the upright posture. After being a few hours in bed the pulse-rate fell to 84; in character the pulse was small, soft, and not sudden. There was no evidence of enlargement of the liver and spleen. No clubbing of the extremities was present. On light diet and small doses of salicylate of soda the pain in the knee disappeared in two days and the pyrexia subsided in four days. On August 16th moist sounds were abundant at both bases behind. There was no cough. On the 20th the diastolic murmur was louder and was heard at the base and down both sides of the sternum. The pulse was small and rather sudden. On the 24th there was pain in the right side on breathing which was probably pleuritic, though no definite friction was heard. For the next week she had a moderate amount of fever in the evenings. On the 26th the temperature rose to 103·4°. Nothing was found to account for the fever except the crepitations at the bases. In other respects she felt well. Up to Sept. 5th for a week she had been practically free from fever. That morning she brought up three or four pints of blood, becoming collapsed, restless, and covered with sweat; the pulse was almost imperceptible. On the 6th she vomited some altered blood during the night. The pulse was 96. On the 21st the temperature had remained down and there had been no more hæmorrhage. She had been on full diet for two days and allowed to sit up in bed. On the 24th she was up in a chair. On the 26th more hæmorrhage occurred. Although she had been on liquid or semi-solid food and seemed to progress favourably, being bright and cheerful and free from fever, she had another attack of hæmorrhage on the night of Oct. 5th and on the night of the 6th she brought up about three ounces of blood. On the 7th she brought up a few clots on vomiting in the morning. The heart was more dilated, the apex being felt an inch outside the nipple line in the sixth space. At the apex there was a systolic and diastolic murmur, the former not being conducted into the axilla. A marked diastolic thrill was now felt over the left border of the sternum and the diastolic murmur was very much louder. On the 10th she brought up over a pint of blood with vomiting, became very pale and collapsed, and died quietly in a few

[1] A paper read before the Society for the Study of Disease in Children on Nov. 15th, 1901.

minutes. The temperature was normal or subnormal during the last two weeks of life.

Necropsy.—At the post-mortem examination rigor mortis was present. A little blood was exuding from the nose. The trachea contained frothy blood. A little blood-stained fluid was present in the left pleural cavity. The left lung weighed 16½ ounces; a large infarct filled up about one-eighth of the lower lobe and the blood-vessel immediately above this contained an ante-mortem clot. Many smaller infarcts were also present in this lobe. The right lung weighed nine ounces; there were many pleuritic adhesions and many small infarcts were present in the lower lobe. The pericardial cavity contained about an ounce of clear serum. The heart weighed 11 ounces and was very firm and globular; the right side was much hypertrophied. The pulmonary valves were much thickened and puckered. On two of the valves were large warty vegetations with apparent loss of substance. The right ventricle was dilated, its walls being much hypertrophied, and the musculi papillares were much enlarged. All the other valves were normal. The liver weighed 31 ounces and showed commencing "nutmeg" change, the spleen weighed six and a half ounces, and the kidney six ounces. No infarcts were found in any of these organs. The stomach contained nearly two pints of frothy blood. Blood was present in the duodenum. No ulceration of the mucous membrane was found.

Remarks.—The case presented all the classical signs of the lesion. The cardiac apex was displaced downwards and outwards. There were marked dilatation and hypertrophy of the right ventricle and epigastric pulsation. In addition, there was a diastolic bruit heard in the third and fourth left intercostal spaces, close to the sternum, a bruit which might easily have been ascribed to aortic regurgitation, but the typical water-hammer pulse of the latter lesion was absent. Further, the murmur was intensified on expiration and in the upright posture. Emboli were carried to the lungs and produced frequent attacks of hæmoptysis. Such hæmoptysis is said to be present in one-third of the cases, chiefly in those due to infective endocarditis. A capillary pulse has been described as occurring in the pulmonary circulation—i.e., a jerky vesicular murmur, waxing and waning with the cardiac contractions. It was not detected in this case.

It is a curious fact that although pulmonary stenosis is a common lesion it is rarely associated with incompetence, whereas the reverse holds good in aortic lesions. This can be accounted for by the low blood-pressure in the pulmonary circulation not creating a regurgitant stream sufficiently powerful to produce a murmur, even if the valves are incompetent.

The case presented many difficulties from a clinical point of view. The physical signs were those of pulmonary regurgitation, associated with a high complexion suggestive of some pulmonary stenosis, and a variable pyrexia which might be due to rheumatism, infective endocarditis, or pulmonary complications. On the other hand, there was no evidence of pulmonary stenosis, such as clubbing of the extremities and a systolic murmur or thrill in the pulmonary area. The rarity of pulmonary regurgitation made one think that a more probable diagnosis was that of aortic regurgitation, but the absence of a characteristic pulse, the absence of signs of hypertrophy and dilatation of the left ventricle, and the presence of signs of dilatation and hypertrophy of the right ventricle were opposed to such a view. In addition, it would have been necessary to assume the presence of some congenital lesion to account for the high colour. Again, the history of past rheumatic fever and the presence of pain in the knee suggested that the aortic lesion was the more probable, for rheumatic endocarditis rarely affects the pulmonary valves. In fact, in cases of pulmonary regurgitation a past history of rheumatism has only been recorded in about 10 per cent.

Another possible diagnosis was that of mitral stenosis associated with adherent pericardium. In favour of this was a note when the child was first admitted in May that the sounds "seemed a little sticky." The murmur was, however, too characteristic of regurgitation through the aortic or pulmonary valves, and the characters of the pulse were opposed to such a diagnosis.

Infective endocarditis was suggested as a cause on account of the pyrexia and the unusual physical signs. Moreover, it is stated in text-books that a diastolic pulmonary murmur is not heard except in the presence of infective endocarditis. On the other hand, it must be pointed out that the murmur was present for many months and while the patient was apparently in good health. The pyrexia was not serious or constant and there was no fever at all during the last fortnight. The purpuric spots were a little in favour of infective endocarditis, but they were few and soon disappeared. There were no albuminuria, no diarrhœa, and no splenic enlargement. The hæmorrhage presented difficulties; it was, no doubt, from the lungs, but it was always accompanied by vomiting and ascribed by the house physician who saw it to hæmatemesis. If it had come from the stomach it could be explained as the result of cardiac failure and secondary passive congestion of the stomach.

Was the case one of infective endocarditis? On the one hand, this is the usual cause of the condition. On the other hand, the diastolic bruit was present for at least five months before the fatal issue, and the infarcts in the lungs showed no signs of breaking down. Possibly the endocarditis was rheumatic in origin.

Upper Brook-street, W.

COMBINED FŒTAL AND MATERNAL DROPSY.

BY H. VALDEMAR MUNSTER, M.D. EDIN.

AN example of the above rare condition having occurred in my private practice I have thought the case to be deserving of a place in medical records.

The patient, a married woman, 31 years of age, was due to be confined on Nov. 26th, 1901. I was called to her on Oct. 8th on account of her size being remarkable and her feet being very swollen. I found enormous anasarca of the lower limbs and the abdomen, and my first thought was that the case was one of hydramnios with secondary pressure symptoms, for the abdomen was really enormous, measuring 40 inches in circumference. Indeed, the patient had great difficulty in getting about at all, although she was a strong woman otherwise. On being questioned she said that she had not observed fœtal movements for some time. The urine was very scanty, was loaded with urates, and contained a quantity of albumin. I advised rest in bed. On the 9th I examined the patient more carefully, and found both lumbar regions resonant. The fœtal heart sounds were audible in the usual area and they numbered about 132 per minute. Diarrhœa had occurred several times in the night. My partner, Dr. T. E. Purdom, saw the patient with me on the 10th, and agreed with me in treatment—namely, in advising to await developments. He also thought that the case was one of hydramnios. I was sent for at 5.30 A.M. on the 12th, labour having set in. I found the os dilated, so at 6.30 I burst the membranes when to my surprise only about half a pint of liquor amnii was discharged. I was still more puzzled to feel high up a boggy mass presenting, giving exactly the sensation of pressing an œdematous area. The bowels had been moved at 2 A.M., and urine had been voided subsequently. At 9.15 A.M. I put on forceps and after great difficulty delivered the head of the child, which at first sight looked like an anencephalic fœtus without any bridge to its nose. Subsequent examination, however, proved that the altered shape was entirely due to anasarca. Soon after this the uterine contractions came on with redoubled vigour, but no further progress towards delivery was made although I applied vigorous traction. At 10.30 A.M. I concluded that there was some enormous abdominal tumour in the fœtus rendering delivery by natural efforts impossible. I therefore sent an urgent message to Dr. Purdom, fearing that even abdominal section might be needed to save the life of the mother. Dr. Purdom arrived almost immediately and we at once proceeded to put the patient deeply under chloroform. When she was fully under Dr. Purdom introduced his hand into the uterus and made vigorous traction, the internal hand being hooked between the child's legs and the external hand applied to the child's head and arms, the child being by this time dead. After about 40 minutes' hard work, during which I aided Dr. Purdom by grasping the uterus externally, he succeeded in extracting the body of an enormously dropsical fœtus. The uterus was still quite as big as an ordinary full-term uterus, and the reason of this was found to be that the placenta was œdematous and about as large as four or five ordinary placentæ put together. There was free but not excessive bleeding during the third stage and the liquor amnii was quite of an ordinary quantity.

At 4 P.M. I returned to see how the patient was and found her to be doing well. I then proceeded to examine the body of the fœtus. An incision into the boggy tissues of the scalp showed that the skull was intact, but that the scalp was very œdematous over it. Indeed, the whole skin surface of the child's body was distended to the utmost with anasarca and the face was quite distorted. On opening the abdomen, which measured 15 inches in circumference, a large quantity of ascitic fluid burst out, and the thorax was also full of dropsical fluid. I removed one kidney and found it lobulated, but on section it did not show any morbid appearance. The mother made an uneventful recovery, the dropsy passing off in a few days and the albumin disappeared from the urine. This was the sixth pregnancy and the patient had given birth to several healthy children, though the fourth and fifth pregnancies had been abnormal.

The case is instructive in showing what great difficulties may be overcome by persistent traction and counter-pressure over the uterus. A real advantage might be gained in such cases by carefully introducing an instrument with the object of puncturing the child's abdomen when it was discovered to be enlarged by the operator's internal hand, but this would be a delicate and not very easy procedure and would almost require a special trocar and cannula for the purpose. In cases of fœtal dropsy the child invariably dies soon after, if not before, delivery, so that saving the infant's life is not a question to be much thought of.

I regard the case as one of primary dropsy of the ovum and secondary dropsy of the mother, caused in her case by pressure of the enlarged uterus upon her kidneys and abdominal blood-vessels. I am quite at a loss to account for the fœtal condition, and as the literature of the subject appears to be very scanty I should be glad to have a little light from someone of wider experience and knowledge on the etiology of such cases.

Croydon.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF ACUTE SUFFOCATIVE PULMONARY ŒDEMA.

BY FREDERICK W. ROWLAND, M.D. DURH.

DR. JOHN LINDSAY STEVEN'S clinical lecture on Acute Suffocative Pulmonary Œdema reported in THE LANCET of Jan. 11th, p. 73, brings to my mind a case I saw recently which I think must be an example of this disease. If so, it shows again how it may suddenly attack a previously healthy person. It also shows that it may rapidly prove fatal.

Arriving at a house at 3 A.M. one day I found the old man whom I had been called to see lying in the semi-recumbent position, dead. The history was that he had been in perfect health till the previous day, when he had complained of feeling unwell and had said that he thought he had a cold; but he went to bed and fell asleep as usual. About midnight, however, he awoke and complained of difficulty in breathing. This became rapidly worse. He was now expectorating copiously. His wife put on a mustard poultice to ease his breathing, but he died about 2 A.M. almost before his relatives realised how ill he was. He was a thin, slightly-built man, 65 years of age. The spittoon contained about six ounces of frothy, yellowish, serum-like fluid.

I made a post-mortem examination later in the day. On the right side of the chest there was a small quantity of fluid in the pleural cavity. The left lung was fixed by old adhesions to the chest wall. Both lungs were markedly œdematous, but the left was much more so than the right. There were no phthisical scars at either apex. The trachea and bronchial tubes were full of white froth and yellowish serum. The kidneys were healthy. The capsules stripped off easily without taking any kidney substance with them. The surfaces beneath were not quite smooth and there were one or two cysts on one of them, but the amount of cortex was good and there were no signs of granular degeneration. Neither was there any visible hyperæmia. The other organs were healthy.

May not this have been a case where the fatal result was brought about through the feebleness of advancing age before the expectoration had time to become blood-stained? The patient was said to have had good health for many years, and his wife did not know that he had suffered from pleurisy.

I must confess to considering it a case of acute inflammatory œdema at the time, after looking it up in the text-books, but it certainly does not come under that heading as defined in Wilks and Moxon's "Pathological Anatomy," third edition, p. 339.

Brighton.

A CASE OF VAGINA DUPLEX.

BY EDGAR W. SHARP, M.B. GLASG.,
SENIOR HOUSE SURGEON, BURY INFIRMARY, LANCS.

WHILST operating on a woman, aged 41 years, for a fissure of the anus and also hæmorrhoids an unusual fleshy projection was observed situated between the labia. This led to an examination which revealed a condition of vagina duplex. The vagina was divided by a fleshy partition running from before backwards and from the cervix uteri, where it was somewhat thin and membranous, to the vaginal orifice, where it was almost half an inch in thickness. The greater part of the septum on both sides was covered with the corrugated mucous membrane of its respective half of the vaginæ. There was a small communication near the cervix between these two halves. The cervix uteri was somewhat small. There were no distinct fornices and the os uteri was situated on the left side. On examination bimanually and per rectum the uterus was found to be small, but otherwise apparently normal. The patient had had no difficulty with menstruation; she was married, but had never been pregnant.

Bury.

THE WIDAL REACTION IN TUBERCULOUS MENINGITIS.

BY EDWARD MACKEY, M.D. LOND.,
PHYSICIAN TO THE SUSSEX COUNTY HOSPITAL AND CONSULTING PHYSICIAN TO THE ROYAL ALEXANDRA CHILDREN'S HOSPITAL, BRIGHTON.

THE following case seems of sufficient importance to be recorded, since it is customary to consider the Widal reaction as a reliable help in what is often a difficult matter—namely, the diagnosis between enteric fever and meningitis. It is not always that a history so complete can be secured as in the present case.

The patient, a single woman, 28 years of age, was sent into the Sussex County Hospital as a case of enteric fever by her medical attendant, mainly on the strength of a positive Widal reaction obtained in the Brighton Corporation laboratory. I am informed that the dilutions employed there are 1 in 10 and 1 in 30, with a half-hour limit, and a record is usually kept; but in the present instance the counterfoil of the certificate was, through an oversight, not properly filled up, so that an exact statement on this point is not now possible; the Sussex County Hospital notes show, however, that on Nov. 2nd a positive reaction was obtained with a 1 in 10 dilution in 10 minutes and with a 1 in 20 dilution in 20 minutes by Mr. P. M. Perkins, the resident pathologist.

The patient was admitted on Oct. 30th, 1901, and was said to have been ill for 14 days chiefly with headache and vomiting, which still continued more or less. She had had no illness requiring attention during the past two years, and she gave no history of chest trouble but of "hip-disease" at the age of nine years, the result of which might be traced in an old backward dislocation at the knee. Her father had died from cancer; her brother and sister were healthy. There was no other illness in the establishment where she lived and no cause was known for her present attack; her only previous complaint was of rather frequent headache for some time past. On admission her temperature was 101·2° F., her pulse-rate was 76, and her respirations were 24. She lay in bed on her side, with her head, which was rather retracted, turned away from the light, pressing against the pillow. She opened her eyes when asked a question and answered "Yes" or "No," but

soon relapsed into a drowsy or indifferent state; she had frontal headache and pain in the back; her cheeks were flushed, her tongue was coated, white, and tremulous. The bowels, which had been constipated all through the illness, were opened freely on the previous day after calomel, but the stools were not characteristic. There were no "spots" nor had there been any. The abdomen was rather retracted than distended. The menses were said to be regular. The urine was acid, of specific gravity 1024, and deposited phosphates; it contained no albumin. There were no abnormal chest signs or symptoms and no enlarged glands; the spleen was palpable, but seemed to be elongated rather than full. On Oct. 31st, at 10 A.M., the temperature was 101·6° and the pulse was 84; at 10 P.M. the temperature was 100·6° and the pulse was 68. On Nov. 1st, at 10 A.M., the temperature was 100·4° and the pulse was 60; at 10 P.M. the temperature was 100·2° and the pulse was 72. On the 2nd the patient lay in a condition similar to that at the time of admission. No definite relief was obtained from a mixture of antipyrin and caffein; there was no action of the bowels; there were some vomiting and difficulty in feeding. Mr. W. Griffin reported that there was no appearance of optic neuritis or other eye symptoms. An enema of olive oil was given. At 10 A.M. the temperature was 99·0° and the pulse was 72; at 10 P.M. the temperature was 102·0° and the pulse was 65. On the 3rd the stupor had deepened and the patient resented interference; the evacuations, passed unconsciously, were semi-solid, light-coloured, and small. At 10 A.M. the temperature was 100·4° and the pulse was 72; at 10 P.M. the temperature was 100° and the pulse was 112. On the 4th it was recorded that she had been in a profound stupor all night, but that this morning she answered questions, opened her eyes, showed her tongue, and seemed to be conscious for a short time; she said at first that she had no pain, but later she complained of her head; the knee-jerks were brisk; she took food better. At 10 A.M. the temperature was 100·6° and the pulse was 80; at 10 P.M. the temperature was 100·2° and the pulse was 78. On the 5th it was recorded that she was unconscious all night; her limbs were rigid at times and her breathing was stertorous; she had to be fed by a nasal tube; urine was passed unconsciously; and there was some spasmodic contraction of the left side of face. At 10 A.M. the temperature was 101·4° and the pulse was 96; at 10 P.M. the temperature was 101·2° and the pulse was 120. On the 6th, early in the morning, she seemed to be choking and convulsions set in, affecting mostly the head and right arm; she was much cyanosed and there was double internal strabismus; frothy vomiting of a coffee-ground character occurred and continued at intervals till death, which took place at noon. At 10 A.M. the temperature was 100·2° and the pulse was 160. From Oct. 30th to Nov. 4th the respirations varied from 16 to 24 per minute; on Nov. 5th the highest rate was 30 per minute.

At the necropsy made on Nov. 7th the brain was found to be rather soft; there was some hyperæmia of the meninges; there was no tumour, lymph, pus, or hæmorrhage, but there were many small, very recent, tubercles along the vessels in both Sylvian fissures, which were not glued together; there was no ventricular effusion. There were old pleuritic adhesions over the lower half of the right lung; there was marked puckering at the apex, and on section a hard calcareous nodule was found of the size of a large pea. There was marked emphysema above the level of the adhesions. Both bases were congested but not solid. In the heart the right ventricle was somewhat dilated; the left was contracted and hypertrophied; there were numerous small transparent, bead-like vegetations along the edges of the mitral valve. There was a slight excess of pericardial fluid. The small intestine showed no sign of ulceration, but there were congestion and scattered miliary tubercles in the lower part of the ileum. There were several enlarged, hard, and injected mesenteric glands. The spleen weighed 12 ounces; it was thin and enlarged lengthwise, but was otherwise normal. (For most of the above notes I am indebted to Mr. P. Foster and Mr. P. M. Perkins, resident officers.)

Remarks.—Although the clinical picture soon after admission was one of meningitis there was much room for doubt in the earlier stages and this doubt was presumed to be cleared up by the Widal test. The present case, together with some few other cases recorded, must tend to qualify the confidence at present reposed in it. The Ehrlich diazo test I have found very much less trustworthy and did not use it. The tuberculosis serum test as propounded by Arloing, Romberg, and others is not yet sufficiently proved to work by, and lumbar puncture did not seem to be justified. I regret that the blood was not examined for the leucocytosis, &c., described by Dr. Bastian. In the absence of lung-signs a further difficulty lay in the mode of onset, since, as Sir Thomas Barlow writes, "this is usually *insidious* in those in whom some latent local tubercle has been consistent with moderately good health—*abrupt* in those whom advanced disease has brought to an emaciated condition" (which was not so here). Another remark of his, however, was well illustrated by the appearances found at the necropsy—namely, in tuberculous meningitis "tubercle in various stages co-exists in many organs of the body ..... in some parts contemporaneous with that in the membranes of the brain ..... in other parts of older date."

Hove, Sussex.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

LONDON TEMPERANCE HOSPITAL.

A CASE OF TRAUMATIC LACERATION OF THE RIGHT KIDNEY; LUMBAR EXTRAVASATION; PARTIAL NEPHRECTOMY; COMPLETE RECOVERY.

(Under the care of Dr. W. J. COLLINS.)

RUPTURE of a kidney inevitably leads to the effusion of blood and urine into the perinephric tissues, and the abscess which follows requires an incision for the release of the pus. The treatment of the damaged kidney will depend on the extent of the injury. If the laceration is severe early complete nephrectomy is strongly indicated; on the other hand, if the kidney substance is only partly lacerated, so that the fragments are still connected by the pelvis, the several fragments should be sutured together. There are, however, intermediate cases in which the injury to the kidney is such as to justify an attempt to retain the organ, but one or more detached or almost separated fragments of kidney substance may be present. In these cases an endeavour should be made to save part of the kidney while removing that portion which is incapable of recovery. This operation of "partial nephrectomy" is comparatively modern, one of the earliest recorded cases, if not the earliest, having been performed by Mr. C. R. B. Keetley[1] in 1890. Several other cases are mentioned by Mr. H. Morris,[2] and it is probable that the operation has been performed many times without having been recorded.

A woman, aged 31 years, was knocked down by a horse and van on Oct. 13th, 1900, one of the wheels of the van passing over her abdomen. She was taken home and was attended by her medical adviser, but alarming symptoms of abdominal pain and collapse supervening she was admitted into the London Temperance Hospital under the care of Dr. W. J. Collins at half-past eight the same evening. The abdomen was full, resistant, and tender (especially in the right lumbar and inguinal regions). The catheter drew blood mixed with the urine. The patient was frequently sick before and after admission and there was some hiccough. For the next two or three days she continued to be in much the same state; but the collapse passed off, and though some sickness continued, the tenderness and resistance in the right lumbar region became less, the urine ceased to be sanious, and the bowels acted naturally.

On Oct. 22nd aspiration of the right loin drew off four and a half ounces of rather offensive blood-stained urine of a specific gravity of 1020, and on the 23rd under chloroform Dr. Collins made an incision five inches long in the right loin in the ilio-costal space, and cutting down to

[1] THE LANCET, Jan. 18th, 1890, p. 134.
[2] Surgery of the Kidney and Ureter, vol. i., p. 191.

the kidney turned out a large quantity of blood-clot and some urine escaped. A portion of the kidney as large as a walnut, together with some smaller fragments, were found torn off from the rest and were removed. A careful examination of the remainder showed that though contused it was not hopelessly damaged and the ureter appeared to be intact; it was accordingly left. The wound was thoroughly irrigated and a large drainage-tube was inserted and lightly packed around with iodoform gauze. The wound was dressed two or three times a day and at first was urine-soaked; incontinence of the vesical urine had been present from the first and persisted, but the amount passed rarely exceeded two pints in the day. On Nov. 11th the urine collected from the wound was acid, that from the bladder being alkaline, and there was some cystitis; the general condition was rapidly improving. At first some seven ounces of urine were collected daily from the wound; this diminished progressively and by Dec. 4th urine had ceased to come from the wound and on the 11th the wound was healed. The patient was discharged on Jan. 1st, 1901; on the three days previously she had passed 63, 58, and 53 ounces of urine.

NORTH WIMBLEDON COTTAGE HOSPITAL.

A CASE OF TETANUS SUCCESSFULLY TREATED WITH ANTITOXIN.

(Under the care of Dr. J. E. BATES.)

THE intra-cerebral injection of tetanus antitoxin cannot be said to have passed the experimental stage, and there is no indication of the spread of this method of administering anti-tetanic serum. Certainly some of the cases in which it has been employed are very striking,[1] but the increased risk is commonly felt not to be compensated by any increased efficiency. Into the question of the value of the serum itself we need hardly enter, it is recognised that when administered early and freely benefit results, but that in many cases its employment does not prevent a fatal result. We appreciate the importance of Dr. Bates's case recorded below, but we must not too hastily attribute the favourable issue to the serum or its mode of administration.

A youth, aged 16 years, first came under the care of Dr. J. E. Bates in the North Wimbledon Cottage Hospital on June 11th, 1901, for a compound Colles's fracture of the right arm. The fracture had occurred on the afternoon of that day, about one hour before Dr. Bates saw him. He was a lad occupied on some buildings which were being erected on the site of an old nursery garden. He met with the accident through falling off a scaffold, and when seen the lower end of the ulna had pierced and was protruding through the skin, shirt, and coat-sleeve, both the end of the bone and the coat-sleeve being covered with mud. A temporary dressing, consisting of a very dirty piece of rag, had been placed over the broken end of the bone. After a very careful cleansing of the wound, a nail-brush being used and an anæsthetic being given, the fracture was reduced after some difficulty and put up in splints. Three days later (on the 14th) there arose much swelling, œdema, and general redness of the forearm and hand with an evening rise of temperature to 102° F. All these symptoms soon subsided under hot boric fomentations although the wound still continued to discharge freely.

Eleven days after the injury (on June 22nd) the patient noticed that the muscles of his jaw were a little stiff; but the stiffness was so slight that he omitted to mention it to Dr. Bates when he saw him on that day. The next day (the 23rd) the symptoms had materially increased. He could only get his mouth half open, and this caused him pain. Both sterno-mastoid muscles were tense and he also had difficulty and pain when trying to swallow fluids. On the 24th there was an alarming increase of all the symptoms. The jaw was closed tightly, swallowing of fluids caused choking and dyspnœa and was very painful, the muscles connecting the head and trunk anteriorly and posteriorly were all absolutely rigid, and he complained of painful jerky spasms in his right arm. Dr. Bates saw him in consultation with Mr. E. Pocklington and Mr. R. T. P. Collyns of Wimbledon, and it was decided to give him the benefit of antitoxin without delay.

On June 24th, at 5 P.M., assisted by Mr. Pocklington and Mr. Collyns, Dr. Bates trephined the patient over the right parietal bone anteriorly and injected five cubic centimetres of antitoxin (obtained from the Jenner Institute of Preventive Medicine) into the right lateral ventricle of the brain, and at the same time 35 cubic centimetres of the antitoxin were injected into the loins. The patient stood the operation well and a marked quickening of the pulse was noticed during the intra-cerebral injection. During the night after the operation the pulse-rate rose to 116; but it had dropped to 98 on the next morning and never rose above 100 subsequently. The temperature once after the operation rose to 99·6°, but never higher. For 48 hours after the operation the symptoms showed no signs of amelioration, but, on the other hand, they became no worse. On the 27th (three days after the operation) improvement set in in all the symptoms and was steadily maintained so that by July 6th (12 days after the operation) the patient was allowed to eat solid food and to sit up out of bed. On July 1st (seven days after the operation) the wound in the head was dressed for the first time and found to be completely healed by first intention.

Remarks by Dr. BATES.—The points of interest in this case I think are these: (1) the dates of the exciting cause and onset are quite clear and distinct; (2) the patient at the time of the accident was living an outdoor life and was in robust health; (3) the patient all through the illness never failed to take his nourishment well, although part of the time he had great difficulty and pain in doing so; and (4) the rapid onset of the symptoms, their speedy and alarming progress, the manner in which the injection checked their progress and also the patient's comparatively swift and entire recovery. Finally, I must tender my sincere thanks to Mr. Pocklington and Mr. Collyns, without whose advice and assistance I feel sure the patient would not have made such a rapid and complete recovery from such an awful disease

[1] Medical News, Oct. 22nd, 1893.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

A Case of Phlegmonous Gastritis due to Streptococcus Infection.—A Case of Pneumococcus Gastritis with General Infection.—The Bacteriology of a Case of Rapidly-spreading Gangrene.—The Transmission of Hæmolysins from Parents to Offspring.

A MEETING of this society was held on Jan. 21st, Mr. W. WATSON CHEYNE, the President, being in the chair.

Dr. W. CAYLEY related a case of Phlegmonous Gastritis due to Streptococcus Infection. The patient, a woman, aged 26 years, was admitted into the Middlesex Hospital on Nov. 19th and died on Nov. 21st. She had been taken ill without any assignable cause on Nov. 13th with rigors, sore-throat, headache, and pain in the abdomen and limbs. On the 17th she began to vomit and continued to do so on the 18th; the vomiting was accompanied by severe abdominal pain. On admission she presented all the symptoms of acute general peritonitis with dilatation of the stomach. Her temperature was 104·6° F. She gradually sank and died on the 21st. She had no vomiting or action of the bowels after her admission. At the necropsy there was general suppurative peritonitis; the stomach was dilated and its coats were thickened. On section there was purulent infiltration of all the coats of the stomach between the mucous membrane, which appeared intact, and the peritoneum; this change was most marked over the pyloric third of the organ. Bacteriological examination of the purulent exudation from the submucous coat showed a number of bacilli which did not stain by Gram's method and which resembled morphologically bacillus coli communis; there were also present a few short chains of streptococci which stained by Gram's method. The other organs presented nothing abnormal. It was probable that the streptococcus infection was primary and the bacillus coli a secondary effect. Dr. Cayley referred to the cases of phlegmonous gastritis collected by Dr. R. F. C. Leith in Vol. IV. of the Edinburgh Hospital Reports and to some which had been published since. Two conditions were necessary, the presence of virulent organisms and a condition of the mucous membrane which would allow them

to penetrate. With regard to the second point it was remarkable in how large a proportion of cases the patients were of intemperate habits or the attack had followed some excess or error of diet. It had also supervened on cancer, ulceration of the lower end of the œsophagus, and injury. The source of the virulent organisms did not appear to have been ascertained in any of the cases; dental suppuration connected with the teeth and jaw might be a possible cause in some cases. He was not aware that any fatal case had been diagnosed during life. Dr. Dörbeck claimed to have diagnosed a case which recovered, mainly from the presence of pus in the vomit. The symptoms to be expected would be epigastric pain and tenderness, dilatation of the stomach, vomiting, with possibly the presence of pus in the vomit, high temperature, and the supervention of acute general peritonitis, but these symptoms were by no means always present and in some cases the disease had run a latent course and the implication of the stomach was only discovered on post-mortem examination.

MR. ALEXANDER G. R. FOULERTON read a paper on a case of Pneumococcic Gastritis, with some remarks on the Infection of Mucous Membranes by Diplococcus Pneumoniæ. The symptoms were those of septicæmia with petechial hæmorrhages in the skin. At the necropsy there were found numerous petechial hæmorrhages into the subcutaneous tissue, "mulberry spots" on the face and neck, petechial hæmorrhages on the epicardium and into the substance of the liver and kidneys, and an acute fibrinous exudation extending over the surface of the stomach. Cultures of diplococcus pneumoniæ were obtained (1) from the exudation on the lining of the stomach; (2) from one of the mulberry spots on the face; and (3) from an interstitial hæmorrhage into the right lung. Microscopic section of the wall of the stomach showed the formation of an exudation membrane, with an extensive necrosis of the glandular layer. The only similar case previously recorded was that by Dieulafoy who had described a case of pneumococcic ulceration of the stomach.

MR. FOULERTON said that the submucous coat of the specimen shown by Dr. Cayley was infiltrated with pus and was at least three times thicker than normal.

MR. S. G. SHATTOCK said that a similar case had been recorded by Mr. A. Q. Silcock as occurring after gastrostomy; the submucous membrane was in that case very much swollen.

DR. A. G. AULD suggested that the condition of the stomach might have been due to a mixed infection.

DR. F. W. ANDREWES said that there were many fibrinous exudations in which the pneumococcus could be demonstrated and he thought that Mr. Foulerton had correctly attributed the formation of this membrane to the presence of the diplococcus pneumoniæ.

DR. H. D. ROLLESTON referred to the work of Dr. William Hunter on Phlegmonous Gastritis who held that the source of the infection was carious teeth. He asked Dr. Cayley what was the condition of the teeth in his case. He mentioned also the occurrence of duodenal ulcers in association with pneumonia; in these, however, the pneumococcus had not been demonstrated, and they were usually regarded as of toxic origin. He suggested also that the ulcers found in the colon were of the same nature.

DR. HAROLD SPITTA read a short paper, illustrated by a series of lantern slides, on the Bacteriology of a case of Rapidly Spreading Gangrene without Emphysema which recently occurred in St. George's Hospital as the result of a lift accident. The wound was very much contaminated with dirt and was of an extensive nature, and involved a fracture of the four outer metacarpal bones and the lower third of the radius. From the pus he isolated in a pure state a square-ended, non-sporing, gas-producing, capsulated, anaerobic bacillus, which on inoculation proved highly virulent to guinea-pigs, death resulting in 15 hours. He was able to recover this organism from the subcutaneous, pleural, and peritoneal glands, and also in pure culture from the heart blood of the animals inoculated. It was a strict anaerobe, grew well at 37° C., and more slowly at 21° C. Most of the ordinary laboratory media proved suitable for its cultivation, especially those containing glucose and traces of sodium formate. Both sugars and carbohydrates were fermented, and in the former tubes gas production was always very excessive. In glucose formate bouillon growth was always very rapid, a dense turbidity with a thick ropy sediment being found in addition to much gas formation. On potato the organism formed a transparent, almost invisible, film, but in milk and on gelatin at 21° C. no growth was ever obtained. On solidified serum the bacillus grew well, forming, as on agar, small, discrete, circular, non-liquefying colonies of a greyish colour about three-quarters of a millimetre or so in diameter. The organism never stained well by the method of Gram and seemed always very prone to decolourise in small dots. Considering its pathogenicity and certain of its cultural characteristics Dr. Spitta suggested its resemblance to Welch's bacillus aerogenes capsulatus, though clinically the marked absence of emphysema was not in accordance with typical cases of infection with Welch's organism. In conclusion, he commented on the extreme difficulty he had experienced in preserving the vitality of the organism for more than a few generations outside the body, and remarked that he believed that this had been the experience of others.—DR. W. BULLOCH said that he had examined several such cases as that recorded and had isolated a similar bacillus. He had experienced great difficulty in obtaining the organism in pure culture and it died out very rapidly. The organism he had isolated stained well by Gram, and although these slight differences were present he considered that in all probability it was the bacillus described by Welch.

DR. W. BULLOCH made a communication on the Transmission of Hæmolysins from Parents to Offspring. The hæmolysins were prepared by injecting the blood of the ox into rabbits, the serum of the latter acquiring a hæmolytic power towards the corpuscles of the ox. The hæmolysin was compound and depended for its action on two bodies—viz., the amboceptor and the complement. Immune males did not propagate their immunity to their offspring by normal females. Hæmolytic females immunised anterior to the conception gave birth to young the blood-serum of which was also hæmolytic. The milk was not hæmolytic in the native state, but in complementing it with normal serum Dr. Bulloch had found that it contained relatively large quantities of immune body.—DR. AULD asked if the immune body introduced into the stomach with the milk passed directly as such into the blood without alteration.—DR. BULLOCH said that in young animals the immune body passed into the blood from the stomach without undergoing any alteration. As an instance of this he said that young animals sucking milk from a mother immunised against tetanus acquired a very considerable immunity against tetanus.

LARYNGOLOGICAL SOCIETY OF LONDON.

Exhibition of Cases and Specimens.

A MEETING of this society was held on Jan. 10th, DR. E. CRESSWELL BABER, the President, being in the chair.

DR. A. BRONNER showed a specimen of a Pedunculated Angeioma of the Larynx in a man, aged 63 years. Excessive hoarseness was the only symptom. The growth was raspberry-like in appearance and size and was removed by forceps. Microscopical examination showed it to be a nævoid growth in the mucous membrane.

DR. SCANES SPICER showed a case of Saddle-nose treated by subcutaneous injections of vaseline. The technique of this treatment was explained thoroughly and the danger of the vaseline passing upwards into the eyelids was pointed out. This accident had occurred in the present case, but otherwise the treatment had been most successful, the patient having a well-shaped nose.—MR. P. R. W. DE SANTI suggested that a piece of lead sheeting should be applied over the parts adjacent to the root of the nose and that firm pressure should be exerted on it during the injection of the paraffin, in order to overcome the likelihood of the paraffin passing into the eyelids.—DR. H. LAMBERT LACK thought that it might be possible to raise the skin and to make a small cavity into which to inject the paraffin.

DR. SCANES SPICER also showed (1) a case of Multiple Suppurative Sinusitis and Polypoid Disease of the Nose, for the relief of which radical operations had been undertaken with success; and (2) a case of Bony Thickening over, and Polypi within, the Right Frontal Sinus in a man, aged 46 years, for which a radical operation had been performed. This was followed by a recurrence of the bony growth and the commencement of similar symptoms on the opposite side of the face.

DR. W. MILLIGAN showed: 1. A specimen of Lipoma of the Pharynx which extended upwards behind the level of the soft palate and downwards behind the larynx. The tumour was removed successfully by lateral incision in

the neck. 2. A microscopical section of a Fibro-sarcoma of the Right Vocal Cord in a male, 61 years of age. After a preliminary tracheotomy, thyrotomy was performed and the growth was removed successfully, and there was no recurrence 12 months later. It was reported to be a fibro-sarcoma by the Clinical Research Association. Some doubt as regards the diagnosis in both these cases was raised, and Dr. Milligan consented to place the specimens in the hands of the Morbid Growths Committee. 3. x-ray photographs of a Plate of Teeth lodged in the Larynx, a Rubber Tube in the Maxillary Antrum, and a Eustachian Catheter in the Frontal Sinus.

Dr. HENRY SHARMAN showed specimens of Papilloma of the Tonsil and of the Posterior Pillar of the Fauces. Under the microscope it was clearly seen that the papilloma of the tonsil grew from the surface of the tonsil proper and not from the interior of a lacuna.

Dr. ATWOOD THORNE showed a Self-looping Nasal Polypus Snare made at his suggestion by Messrs. Mayer and Meltzer.

Dr. W. JOBSON HORNE showed a case of Nasal Obstruction in a woman, 24 years of age. Inferior turbinectomy had been performed six years previously, giving roomy inferior passages, but there was narrowing of the upper passages due to enlargement of the middle turbinate. Dr. Horne thought the case interesting in relation to the observations of Mr. C. A. Parker on the direction of the air-currents in the nose, and he also raised the question as to whether the hypertrophied middle turbinate could be secondary to the removal of the inferior turbinate.—Dr. H. TILLEY and Dr. SCANES SPICER were of opinion that the difficulty of inspiration was due to collapse of the alæ nasi, and a discussion ensued upon the best method of treating this deformity.

Dr. S. H. SNELL showed a case of Herpes of the Palate.

Dr. J. DONELAN showed a case of Syphilitic Laryngitis in a man, aged 52 years. In spite of energetic anti-syphilitic treatment the local condition had become worse and Dr. Donelan raised the question as to whether it had become malignant.

Mr. DE SANTI showed a case of very extensive Destruction of the Interior of the Nose due to Tuberculous Ulceration in a woman, 51 years of age. The patient was suffering from pulmonary phthisis, but at the same time she showed evidence of syphilis in the pharynx. He suggested that this was a case of mixed infection.—The PRESIDENT suggested the advisability of examining the sphenoidal sinus, as he did not think that tuberculosis alone would produce the condition seen.—Dr. H. W. FITZGERALD POWELL had no doubt that the case was one of tertiary syphilis.

Dr. F. W. BENNETT showed a case of Ulceration of the Nasal Septum. The case was of long standing and had been under observation since 1898. There was marked pain in the nose, especially on the right side, where the tissues were considerably swollen. The septum was perforated and the nostril was filled with muco-purulent secretion. The patient had been treated by means of local application, tonics and iodides, but without benefit. The question raised was the nature of the ulceration. Opinion was divided as to whether it was simple, tuberculous, or syphilitic.

Dr. J. DUNDAS GRANT showed a case of New Growth on the Tonsil in a woman, aged 32 years.

LIVERPOOL MEDICAL INSTITUTION.

Exhibition of Cases and Specimens.—Graves's Disease.—Malaria.—Uterine Curettage.

A MEETING of this society was held on Jan. 16th, Mr. RUSHTON PARKER, the President, being in the chair.

Dr. EDGAR STEVENSON showed a girl, aged 15 years, with almost complete Palsy of the External Ocular Muscles. There was marked convergence of the eyes on any attempt to raise the head or to move them. Considerable improvement had resulted from four applications of a high frequency current, the patient now having binocular distant vision.

Dr. STEVENSON also showed a woman, aged 25 years, from whom the right lobe of the thyroid gland had been removed four years ago. The general symptoms had improved greatly, but the exophthalmos had steadily increased to quite an unusual degree. The cornea were unaffected and her vision was normal.—Mr. C. H. B. SHEARS said that excision of part of the thyroid gland had produced no improvement in the exophthalmos and asked what was the present position of thyroidectomy in these cases. It was remarkable that vision and the mobility of the eyeballs were normal, for the stretching of the optic nerve and external muscles must be extreme.—Mr. R. J. HAMILTON noted the perfect closure of the lids in this case and drew attention to the unsatisfactory results of operative treatment for goitre when marked exophthalmos was present.

Dr. W. CARTER narrated a case of Graves's Disease in a young man, in which cure resulted, he believed, from the exhibition of diluted hydrofluoric and hydriodic acids. Dr. Carter also mentioned two cases in which partial thyroidectomy was performed; in one death followed in a few days, in the other four years after the operation the symptoms were apparently unchanged.—Dr. J. R. LOGAN had seen a case of Graves's disease practically cured by a prolonged course of bromide of potassium and arsenic. He had seen two marked cases in one family.—Dr. J. HILL ABRAM said that he had seen marked improvement follow partial thyroidectomy, and in Dr. Stevenson's case the general symptoms were notably less than at the time the patient was under observation at the infirmary. Certainly in no other way did they get such speedy relief from the most dangerous symptoms.

Dr. R. J. M. BUCHANAN described a case with recurrent attacks of fever in which there was no leucocytosis and in which one or two of the red cells contained a non-pigmented hæmatozoon. The patient had never been out of England but had been bitten freely by mosquitoes in Kent.—Major Ross thought that the diagnosis of malaria was correct.—Dr. CARTER said that a former house physician, the late Dr. Henry Welch, had typical ague in 1880 after a few weeks' residence near Lancaster in early autumn, just after the valley of the Lune had been flooded.—Dr. BUCHANAN replied.

Dr. H. BRIGGS read a paper on the Uterine Curette and Curettage in Gynæcological and Obstetrical Surgery. He said that his paper was mainly founded on a consideration of the question, Was the modern estimate of the value of the curette as shown by its frequent use amply justified by known results? The results thereof were classified as (1) curative, (2) modifying, and (3) exploratory. After reviewing the tests applied to these results, Dr. Briggs said that the most satisfactory effects of curettage were obtained in the treatment of the uterus, sometime after abortion, by the removal of small pieces of chorion; subsequent microscopical investigation for detection of villi should be systematically carried out, otherwise many such cases were described as cures of endometritis. The best use of the curette was indicated by its inventor, Récamier, in 1850. The dull-curette of Gaillard Thomas was advocated by its inventor in the treatment of uterine "fungosities," an "omnibus" title for most affections of the endometrium known about the mid-period in the history of the curette. Since Nélaton, in 1853, followed by Savage, Routh, Olshausen, Bischoff, Matthews Duncan, and Herman (1880) had described cases of chronic hyperplasia, diffuse or polypoid, of the endometrium, many attempts had been made to differentiate glandular, interstitial, and mixed types of endometritis (Hunter Robb, 1896). Who could, even to-day, separate clinically endometritis, adenoma, and adeno-carcinoma at a period when treatment or diagnosis by the curette was most important? The results of curettage in this particular were discouraging. Dr. Briggs thought that the estimate of the results of curettage, modifying or exploratory, depended, on the whole, more upon dilatation of the cervix to digital size and the use of the finger than upon the mere and otherwise imperfect scraping of the uterus by the curette. A description of the metal dilators used at the Hospital for Women, Liverpool, since 1888, was given; each dilator was made over four sizes of the English catheter scale in the first one and a half inches from the point. Dr. Briggs then discussed the results obtained in the treatment of metrorrhagia and showed sections of the endometrium from cases in which a classification might be attempted, but only on incomplete pathological evidence. He alluded to the thickening of the endometrium associated with uterine fibroids and showed that removal of the fibroids, when justifiable, was the only trustworthy means of arresting the endometrial thickening. Hence such thickening was probably inflammatory in origin. Dr. Briggs then mentioned several obstinate cases of metrorrhagia. In one Dr. Murray Cairns, the medical attendant, and the patient, aged 40 years, both pleaded for removal of the uterus, and the operation was eventually carried out. In some of the other cases the patients had had the uterus curetted three times by

different medical men; one was apparently cured by turpentine gauze intra-uterine packs. Dr. Briggs maintained that collective investigation after the operation of curettage was required to remove doubts as to its present position in minor gynæcological, and especially in obstetrical, surgery.—Dr. W. MACFIE CAMPBELL generally used the loop curette or Donald's flushing instrument. Preferably he curetted first and then washed out; débris was removed with antiseptic gauze and the uterus was packed with the same. His best results were in removal of placental remains in abortion cases; in cases of metrorrhagia he had often been disappointed.—Dr. JOHN E. GEMMELL regarded the finger as the best curette for diagnostic and obstetric purposes, preceded by dilatation of the cervix. He considered, however, that the curette had its place when used intelligently: it was important to weigh carefully the evidence for the true causation of the local condition. Microscopical examination of the tissue removed was most important, especially when considered in conjunction with the feeling imparted through the curette during the operation. —Mr. G. A. HAWKINS-AMBLER said that endometritis was a sufficiently defined condition, and the obstacles in the way of cure after curettage lay in the tendency of medical men and patients to look upon the operation as the end, rather than the beginning, of treatment. He felt that the finger, although the best curette in post-abortion cases, was not always effectual, except in very early cases. The differential diagnosis between adenoma and adeno-carcinoma was not possible in many cases from the examination of mere curettings.—Dr. DAVIES, Dr. A. C. WILSON, and Dr. A. STOOKES also spoke and Dr. BRIGGS replied.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

Partial Nephrectomy.—Injury to Head.—New Gynæcological Instruments.—Exhibition of Cases and Specimens.

A MEETING of this society was held on Jan. 10th, Dr. A. G. BARRS, the President, being in the chair.

Mr. B. G. A. MOYNIHAN read a paper on Three Cases of Partial Nephrectomy. In the first case a solitary cyst of the lower pole of the right kidney was excised; in the second an inflammatory myxo-sarcoma of the lower half of the right kidney was removed; and in the third a solitary cyst in the transverse band of a horse-shoe kidney was excised. All three cases recovered. In the second case the naked-eye appearance suggested tubercle. A portion of the pelvis of the kidney was also removed, the wound which was left being closed by a continuous catgut suture. In all the cases a wedge of kidney substance was removed and the wound which was left was closed by interrupted catgut sutures. Reference was made to the records of similar cases.—Dr. MAULE SMITH, Mr. W. H. BROWN, Mr. H. LITTLEWOOD, Dr. JASON WOOD, and the PRESIDENT took part in the discussion.

Mr. BROWN read notes of two interesting cases of severe Head Injury in which complete recovery ensued.—Dr. F. W. EURICH, Dr. STEWART, Dr. STEVEN, Dr. A. L. WHITEHEAD, Dr. E. F. TREVELYAN, and the PRESIDENT took part in the discussion.

Mr. C. J. WRIGHT showed the following New Gynæcological Instruments—1. A new form of Urethral Speculum which he had found useful in examination and removal of caruncle of the female urethra. It was made on the principle of the duck-bill speculum and was more convenient and less painful than the bivalve or ordinary vulcanite form. 2. A pair of Locking Angular Forceps useful in the examination of, and application of mops and tampons to, the cervix uteri through the speculum. 3. A Metal Box opening with a spring, which could be opened and shut with one hand, for the administration of chloroform by the practitioner in attendance on labour. It provided a ready means of giving chloroform, economising the anæsthetic and preventing its diffusion into the room when shut; it also preserved the chloroform ready for immediate and intermittent use, and the anæsthetic could be discontinued at a moment's notice.

The PRESIDENT showed a Gall-bladder from a case of Perforative Cholecystitis. There were ulcerations and a small perforation on the under surface of the gall-bladder which set up a general peritonitis. The common duct and gall-bladder were both packed with stones.

The PRESIDENT also showed specimens, with drawings, from a case of Henoch's Purpura. There was a large retro-peritoneal hæmorrhage probably originating in the suprarenal capsule and involving the tissues round the right kidney. There were also extensive hæmorrhages into the renal parenchyma as well as small hæmorrhages in the heart and lungs and particularly beneath the mucous membrane of the intestines. The symptoms during life were vomiting, abdominal pain, slight joint symptoms, and extensive purpura.

Dr. TREVELYAN showed a case of Early Locomotor Ataxia with Aortic Disease in a man, aged 50 years. Seven years ago this patient had a hæmoptysis and there was at the present time evidence of some old quiescent disease at the left apex.

Dr. TREVELYAN also showed a case of Locomotor Ataxia in a man, aged 39 years, in which the symptoms were improving under Frenkel's exercise treatment. The ataxia was only of a few months' duration.

Other cases and specimens were shown by Mr. CONSTABLE HAYES, Mr. LITTLEWOOD, Mr. BROWN (with Mr. J. PICKLES), Mr. A. J. POLLARD, and Dr. J. ALLAN.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Exhibition of Cases and Specimens.—Removal of a Cerebral Tumour.

THE fourth ordinary meeting of this society was held on Jan. 15th, Dr. JAMES ANDREW being in the chair.

Dr. BYROM BRAMWELL demonstrated two cases of Syringomyelia. He noted that they were examples of a rare disease, although lately he had had a run of such cases. 1. The first case was that of a youth, aged 17 years, who showed atrophy of the small muscles of the hand; the bird-claw appearance which was so suggestive of the disease was present. The palpebral fissure on the left side was much smaller than was that on the right side, the left pupil was narrower, and the left eye was less prominent as a whole than was the right. The fact of the affection of the sympathetic nerves and the condition of the hand being present at the same time suggested to Dr. Bramwell that this was a case of syringomyelia. All the characteristic features were present: the loss of power in the left hand which had lasted for about a year together with the muscular atrophy. The patient had suffered from incontinence of urine since childhood, and four years ago he had been treated for tuberculous disease of the hip-joint. Disturbances of æsthesia were characteristic of this disease. In this case there was no disturbance of tactile or of painful sensation. Over the left arm, the neck, the front of the chest, and the back, as well as in some other localities, the appreciation of heat and cold was lost. There was a great exaggeration of the deep reflexes in the lower extremities, ankle clonus being present. The lad presented a stumpy and broad appearance, and this had been noted as a characteristic in many cases of syringomyelia. The lesion was situated in the cervical and upper dorsal regions of the cord. 2. The second case was that of a woman, aged 30 years, who had been transferred from Professor T. Annandale's ward in the Edinburgh Royal Infirmary to Dr. Bramwell. She had suffered for a considerable time from sores on the hands and feet—one under the ball of the big toe had persisted for a year. These sores recurred on the palms and fingers of both hands and were not painful. Several of these had developed spontaneously; one recent one resulted from her putting the hand into hot water. This patient presented the same alterations as were observed in the previous case but they were more extensive. Over the upper half of the body as well as in other regions the heat-sensation was lost entirely. The biceps and other muscles of the left shoulder girdle were markedly wasted. The pupils were unequal and the deep reflexes were greatly exaggerated, the jaw-jerk being present. Briefly, the symptoms were in this case disassociated anæsthesia, muscular atrophy, trophic changes, alteration of pupils, and great exaggeration of the deep reflexes.

Mr. HAROLD J. STILES exhibited: 1. A boy after operation for a Punctured Wound of the Brachial Artery opposite to the origin of the superior profunda artery. The wound, which was half an inch in length and which lay over the course of the brachial artery, was enlarged. The basilic vein and the

nerves were uninjured, but a hole was present in the brachial artery plugged up by clot. Ligatures were placed over the torn ends as well as over the superior profunda branch and the ends were cut off. There was never any interference with the circulation in the arm. 2. A girl after second operation (excision) for Plexiform Angioma of the Scalp. At the preliminary operation the feeding arteries of the cirsoid aneurysm were ligatured. Electrolysis subsequently applied had little or no effect in reducing the pulsation—in fact, on her return to the hospital the pulsation was greater than it was before. A horseshoe-shaped incision with its base in front was made round the tumour. Mr. Stiles had great difficulty in dissecting out the vessels and the hæmorrhage was very great. The application of peroxide of hydrogen stopped the bleeding from the small vessels, while sutures around the edge controlled the larger ones. The wound healed well and now there was merely the scar of the operation present.

Dr. WILLIAM ELDER showed a man the whole of whose Thoracic and Abdominal Viscera were Transposed; the sigmoid flexure was digitally proved to be on the right side. The man was perfectly healthy.

Dr. C. W. MACGILLIVRAY exhibited a girl, aged four and a half years, on whom he had operated for Obstruction of the Bowels with Suppurating Tuberculous Retro-peritoneal Glands. Since the age of one year she had been subject to attacks of abdominal pain. Complete obstruction of the bowels commenced on Nov. 27th last with fæcal vomiting. When admitted to the Edinburgh Royal Infirmary on Dec. 3rd she was very collapsed and the abdomen was greatly distended in the middle line. On opening the abdomen the small intestine was found to be bound down by fibrous bands one and a half inches from the ileo-cæcal valve. These bands were divided and ligatured, when the intestinal contents immediately passed into the large intestine. Behind the constriction was an irregular lump, of the size of a Tangerine orange, composed of suppurating tuberculous glands which was removed.

Dr. W. LESLIE MACKENZIE demonstrated a simple form of Spray Pump for Disinfection. He had designed it to meet the case of small towns and hospitals for which the regulation spray was too expensive and too large. It was merely a gardening syringe with a properly adapted nozzle on a long arm and connected by bicycle indiarubber tubing to a force pump. The whole apparatus weighed only eight pounds, was easily disjointed, and so could be carried on a bicycle by the sanitary inspector. A three-nozzle piece could also be attached. To reach very high ceilings the tubing could be lengthened and the nozzle could be attached to the top of a Japanese fishing-rod.

Dr. D. CHALMERS WATSON exhibited photographs from a case of Cerebral Thrombosis in a Horse (unconscious for 24 hours) followed by complete recovery.

Mr. STILES showed as card specimens: (1) A portion of the Brachial Artery from the boy whom he had shown; and (2) a large Congenital Strangulated Cyst, weighing one and three-quarter pounds, which he had removed, together with six inches of small intestine, from a child, aged one year and eight months, who was suffering from acute intestinal obstruction.

Dr. ALEXANDER BRUCE showed a Transverse Section of Aortic Aneurysm.

Mr. J. M. COTTERILL exhibited: (1) A Fœtus and Sac successfully removed in a case of Intra-peritoneal Rupture of a Tubal Gestation; (2) an Aneurysm of the Posterior Ulnar Recurrent Artery; (3) Semilunar Cartilages taken from a series of cases of Internal Derangement of the Knee-joint; (4) Parts removed in a case of Fracture of the Sternum with Dislocation of the Spine; and (5) a Kindey removed from a patient suffering from Profuse Hæmaturia.

Dr. MACGILLIVRAY showed a large Papilloma of the Rectum.

Dr. GEORGE A. GIBSON and Dr. STEWART MCDONALD showed: (1) A Spinal Cord showing Pseudo-Tabes Syphilitica, with a microscopical demonstration; and (2) Hæmorrhage into the Cusps of the Pulmonary Valve, with microscopical sections.

Mr. C. W. CATHCART gave a demonstration on an Adaptation by Dr. Ramsay Smith of the Freezing Microtome for Tropical Climates and of his rapid method of mounting permanent microscopical sections of fresh tumours. The three features which Mr. Cathcart thought specially to deserve attention were: 1. The adaptation of the freezing method of cutting microscopical sections to tropical climates. This was attained by embedding the tissues in cork and spraying ethyl chloride directly on to the tissue. Mr. Cathcart found that his ether spray used in this way did as well as ethyl chloride in a room with a temperature of 60° F. and was much cheaper. 2. The method of cutting, which consisted of a continuous raising of the screw with the left hand simultaneously with a rapid to-and-fro movement of the knife with the right, no attempt being made to adapt the screw at each cut. This was not only rapid but it gave exceedingly good sections, although the exact measurement of them was not attempted. 3. The method of mounting permanently sections of fresh tissues. This consisted in floating out the sections in from 2 to 4 per cent. of formalin after being cut, then floating on to a slide and staining with hæmatoxylin or eosin, dehydrating with absolute alcohol, and mounting in Canada balsam. Dr. Ramsay Smith found that he could cut sections at the rate of from 300 to 400 per minute and prepare and complete a stained permanent preparation within six or seven minutes after receiving the fresh tissue from the body or from the operating theatre. Mr. Cathcart referred the members for complete details of the method to Dr. Ramsay Smith's paper in the January issue of the *Scottish Medical and Surgical Journal*.

Dr. ELDER and Mr. ALEXANDER MILES contributed a paper on a successful case of Removal of a Tumour from the Left Prefrontal Lobe of the Brain.—In the discussion which followed Dr. BYROM BRAMWELL, after congratulating Dr. Elder and Mr. Miles on the successful issue of the case, said that his experience confirmed that of Dr. Elder that very few cerebral tumours were benefited by operation. He himself remembered only one successful case in many which had been operated upon. The chief interest of the paper lay in the points of symptomatology and diagnosis. Three years ago he had recorded 11 cases of frontal tumour in which there was no doubt of the diagnosis. In seven of these there were well-marked mental symptoms, while in four there were none. Amongst other symptoms which he had noted in these cases were mental enfeeblement, loss of the power of attention, irritability, incoherence, delusions of suspicion, &c. It was difficult to say how far the symptoms were due to the tumour in the prefrontal lobe or to the pressure and other causes affecting other parts of the brain. Lesions diffused over the cortex might produce absolutely similar symptoms to those caused by a prefrontal tumour. He thought that it was not possible to draw a distinction between some cases of general paralysis and frontal tumour and he described a case to illustrate these difficulties in diagnosis. They had to depend more on the physical signs than on the mental symptoms in order to arrive at a trustworthy diagnosis of prefrontal tumour.—Dr. EDWIN BRAMWELL said that pain in the back was a very frequent concomitant of cerebral tumour, so much so that he invariably inquired into this symptom in investigating cases of cerebral tumour.—Dr. ALEXANDER BRUCE referred to the distinct degeneration of the posterior nerve-roots seen in many cases of cerebral tumour. The question was whether the nerve-endings were irritated by the accumulation of cerebro-spinal fluid. The pressure on the nerve-roots might give this appearance and might also account for the apparently meaningless sensory disturbances. He referred also to the difficulty in diagnosis between prefrontal tumour and general paralysis.—Mr. COTTERILL, Dr. LOGAN TURNER, and Dr. H. M. CHURCH also spoke.—Dr. ELDER, in reply, said that they were very apt to have a blurring of the symptoms on account of the pressure. He had noted that some symptoms were more marked than might have been expected and that some cases of general paralysis had symptoms specially referable to the frontal lobes, and in such cases it was found that the disease had affected these lobes to a special degree.

CORK MEDICAL AND SURGICAL SOCIETY.—A meeting of this society was held on Jan. 13th, Dr. T. G. Atkins, the President, being in the chair.—Dr. McNaughton-Jones (London) delivered an address on the Critical Analysis of Some Recent Gynæcological Methods. Having discussed the conditions essential for an ideal asepsis the most recent methods of preparing the patient, especially those adopted by Professor Sanger and Professor Bumm at Prague and Halle respectively, were described. The advantage of colletin as a dressing and of bronze aluminium wire or celloidinzwirm as non-absorbable materials for skin-closure was shown. The conditions under which preference should be given to myomectomy over pan-hysterectomy and the question of removal of the ovaries were discussed, as well as

the indications for the abdominal over the vaginal route in the operation for myoma. Among recent methods for hysterectomy those adopted by Zweifel, with his forci-pressure clamp, and Bumm, with Kocher's forceps, were demonstrated. A differentiation of the advantages of the Alexander-Adams, Olshausen's, ventro-suspension and ventro-fixation modes of dealing with retro-deviations was entered into, as affecting the child-bearing period of life. The advantage of performing vaginal ovariotomy for cystoma was questioned, and the choice of abdominal and vaginal coeliotomy in diseases of the adnexa, as influenced by bi-section of the uterus, was considered, with the conditions of complications which gave to colpotomy the preference over vaginal coeliotomy. The justification for an occasional danger in the performance of conservative operations on the adnexa was discussed, and then the four vital points in relation to hysterectomy for carcinoma were touched upon—namely, early pan-hysterectomy, the demarcation between operable and inoperable cases, the best operation when disease had extended outside the uterus (Wertheim's operation was here described), and lastly, the alternatives to operation. The lecture closed with a retrospect of the position of gynæcology at present as compared with that of 22 years ago. All the matters touched upon in the lecture were illustrated by specimens bearing on the questions raised.

SOUTH-WEST LONDON MEDICAL SOCIETY.—A meeting of this society was held on Jan. 8th, Mr. John Gay, the President, being in the chair.—Dr. G. Herschell read a paper upon the Examination of the Stomach Contents as applicable to General Practice. After pointing out the small number of tests which were actually required and the facility with which they could be applied he demonstrated the following: the Congo-red test for free acid; Gunzberg's phloroglucin-vanillin test for free hydrochloric acid; the Topfer method of quantitative analysis of the gastric acids by titration with decinormal solution of sodium hydrate, using phenophthallein, alizarin, and dimethyl-amido-azo-benzol as indicators; the method of ascertaining the presence of rennin and rennin zymogen; and the estimation of the digestive power of the gastric juice by artificial digestion of white of egg; and he showed the successive changes of starch mucilage into erythro-dextrin-achroödextrin, maltose, and dextrin under the influence of ptyalin, and the reactions which were given at different stages with Lugol's and Fehling's solutions respectively. He concluded by exhibiting Turck's aspirator for obtaining gastric contents for analysis, Einhorn's intragastric spray and stomach bucket, Boardman Reed's intragastric electrode, Van Valsah's stomach-tube, and his own three-way-tap apparatus for washing out the stomach.—The paper was discussed by Dr. G. Richardson, Mr. C. R. C. Lyster, Dr. L. S. MacManus, and the President.—A hearty vote of thanks was awarded to Dr. Herschell for his paper.

IPSWICH CLINICAL SOCIETY.—The annual meeting of this society was held on Jan. 9th.—The retiring President, Mr. J. F. C. Hossack, read a most interesting paper on Quakery and Charlatanism in their Relation to Modern Medicine.—The following officers were then elected by ballot:—President: Dr. G. Vincent. Vice-President: Mr. J. F. C. Hossack. Honorary secretary: Dr. W. A. Gibb. Council: Dr. H. H. Brown, Mr. Branford Edwards, Mr. C. K. Moseley, Mr. J. Staddon, Dr. Fowler Ward, and Dr. A. Paterson.—Dr. J. Purves Stewart was proposed, seconded, and unanimously elected an honorary member of the society.

FOLKESTONE MEDICAL SOCIETY.—The annual meeting of this society was held on Jan. 10th at the Burlington Hotel by invitation of the President, Dr. W. J. Tyson. After the annual report had been adopted Dr. C. E. Perry thanked Dr. Tyson for his services to the society as its President during the past three years.—Dr. T. Eastes was then unanimously elected President, Dr. J. Hackney and Dr. Tyson Vice-presidents, and Dr. E. G. Sworder honorary secretary and treasurer.—A musical programme concluded the meeting.

PATHOLOGICAL SOCIETY OF MANCHESTER.—A meeting of this society was held on Jan. 15th, Mr. J. Collier, the President, being in the chair.—Dr. A. Donald mentioned a case of Unruptured Tubal Pregnancy, and showed the specimen.—Dr. Donald and Dr. W. E. Fothergill showed Microscopical Sections from a case of Folliculoma Ovarii Malignum, and made a short communication.—Dr. F. C. Moore described Changes in the Pancreas observed in Diabetes Mellitus, and showed specimens.—Dr. P. Prebble exhibited Salivary and other Calculi.—Mr. Wolstenholme exhibited Sections of a large Aneurysm and Thrombus of a Branch of the Anterior Mesenteric Artery from a young horse, the condition having been produced by the irritation set up by wandering nematodes—immature sclerostomata equina (strongylus armatus). A number of specimens of the parasite taken from the lesion were shown.

Reviews and Notices of Books.

Impressions of a Doctor in Khaki. By FRANCIS E. FREMANTLE, M.A., M.B., B.Ch. Oxon., M.R.C.P. Lond., late Civil Surgeon to H.M. Forces in South Africa. London: John Murray. 1901. Pp. 549. Price 10*s.* 6*d.* net.

WE have read this book with much interest, for its author saw a great deal in South Africa and has consequently a good deal to tell and he tells it well—that is, in a fresh and natural way. It falls to the lot of very few to have had such a field of observation and to have encountered such a varied experience within the same limits of time and opportunity. Under such circumstances it was well worth while to preserve and to publish a record of the author's impressions which are always more or less interesting and suggestive and sometimes valuable and instructive. With much of what is said we quite agree, but we confess, nevertheless, to have laid down the book with a somewhat mixed feeling regarding what he has to say about the army medical department and its officers. Notwithstanding the remarks of the author in his preface and those which he has here and there interspersed in the pages of his book in their defence against the criticisms to which they have been subjected the tone adopted by him is, on the whole, one of disparagement of the medical service and its officers. Every community, it is needless to say, has its good, bad, and indifferent members, and we can only suppose that the author had the bad luck at the outset of his army experience to have come across some undesirable or uncongenial individuals who either fell below his professional standard or ran counter to his views. It may be, after all, that combatant officers at the front in referring to "the medical department in terms of unstinted praise" (page 390) knew something of what they were talking about; and that the medical "system," despite all its real and alleged drawbacks and shortcomings, could not have been as bad as has been represented if the two "German army-doctors" who had "done four weeks' work at De Aar and the front, where they helped personally in the work of the field hospitals" could have been so "very favourably impressed with it" (page 130). These German medical *attachés* were, it may be assumed, well qualified to speak on the point. The system, by the way, is, in principle, much the same as their own which they saw put to the test in the Franco-Prussian war, but which had never before been applied under such conditions and circumstances as obtained in South Africa, because these were unique, and that being so made all the difference in the world. There are many medical officers of experience who think that it is in an increased development of our present medical and hospital system (with some modifications to adapt it better to the diverse and varying conditions of war) rather than in any radical change of that system that the best results are to be hoped for. As regards the maintenance of professional efficiency we have always advocated that increased opportunities and facilities should be given to medical officers in this respect and that greater chances of reward and distinction should be held out to such of them as showed any high professional or scientific merits. The Army

Medical Service as at present constituted has little or nothing to offer in these directions. That this is so is no fault, however, of the medical officers.

Towards the conclusion of the volume the author, after putting forward a plan which would be nearly tantamount to doing away with an army medical department altogether, very strongly advocates the new scheme outlined by Mr. Brodrick's Committee, to which he acted as assistant secretary. We have no desire or intention to enter now upon controversial matters about which there exists, to say the least, much difference of opinion.

Dr. Fremantle went out to South Africa from Guy's Hospital and, as our readers probably know, some strictures of his which appeared in print attracted notice and gave rise to some temporary misunderstanding with the authorities. The subject is very fairly stated and referred to in this volume. After describing the voyage on his first going out in the *Roslin Castle* and his landing at Cape Town, he gives an account of his service at Wynberg, where he saw some of the wounded from Belmont, Graspan, and Magersfontein, followed by his being ordered home on the *Aroca* and of his subsequent return to South Africa. What happened to him there, together with his war experiences, professional and otherwise, at Bloemfontein, in the advance to Pretoria, and elsewhere, during his service at the front, is very well described and well worth reading. We may add that the volume has several excellent illustrations and maps, is printed in good type, and is easy and pleasant to read.

A Treatise on Orthopædic Surgery. By ROYAL WHITMAN, M.D., M.R.C.S. Eng., Instructor in Orthopædic Surgery and Chief of the Orthopædic Department of the Vanderbilt Clinic in the College of Physicians and Surgeons of Columbia University, &c. Illustrated with 447 Engravings. London: Henry Kimpton. 1901. Pp. 650. Price 25*s.* net.

ORTHOPÆDIC surgery has been for many years peculiarly indebted to the work of American surgeons, and it is due probably to that fact that so many books on orthopædics have issued recently from the press of the United States. The present volume is one of the most satisfactory works of the kind that have come before us; in it the subject is treated very systematically, numerous illustrations are provided to elucidate the text, and the treatment, which is discussed very fully, is reasonable and trustworthy.

The first chapter deals with tuberculous caries of the spine. This is probably the most important portion of orthopædic surgery. The consequences when the disease goes untreated cannot be surpassed in severity, while nowhere are the results more satisfactory when suitable and timely treatment is applied. An accurate knowledge of the very earliest signs is therefore of the first importance, and Dr. Whitman gives them exceedingly clearly. We may mention a useful method (new, at least, to us) of demonstrating unilateral contraction of the psoas in spinal caries. The child is placed on the back and the legs are allowed to hang over the edge of the table, when the unaffected thigh will drop below its fellow.

With regard to lateral curvature of the spine the author gives a very full account of the exercises which may be employed. We thoroughly agree with him as to the desirability of employing only exceptionally fixed supports for this condition.

Dr. Whitman thinks that in the treatment of congenital dislocation of the hip Lorenz's method will suffice for 25 per cent. of the patients; and should this method fail he considers that the "open" method may usefully follow and is rendered much simpler by the preceding attempts at forcible correction.

The author discusses the etiology of coxa vara; he does not believe it to be rachitic in origin; he considers that it is "one of the group of static deformities of the lower extremity caused by a disproportion between the strength of the supporting structure and the burden that is put upon it." This is, no doubt, true of many of the cases occurring in adolescence, but it will not serve to explain the cases which develop at an earlier age.

Some very valuable remarks on the correct shape of boots are given in connexion with acquired deformities of the foot.

Much more might be said, but it is unnecessary. We may, however, mention a useful feature. After many of the longer sections a summary is given of the chief points; these additions should prove of great value to readers.

Diseases of the Stomach and their Surgical Treatment. By A. W. MAYO ROBSON, F.R.C.S. Eng., Member of Council and Hunterian Professor (1897 and 1900), Royal College of Surgeons of England, Senior Surgeon to the General Infirmary at Leeds, Emeritus Professor of Surgery in the Yorkshire College of the Victoria University, &c.; and B. G. A. MOYNIHAN, M.S. Lond., F.R.C.S. Eng., Assistant Surgeon, Leeds General Infirmary, Arris and Gale Lecturer (1899 and 1900), and Member of the Board of Examiners in Anatomy for the Fellowship, Royal College of Surgeons of England, &c. London: Baillière, Tindall, and Cox. 1901. Pp. 308. Price 15*s.* net.

IN 1900 Mr. Mayo Robson delivered the Hunterian Lectures at the Royal College of Surgeons of England on the Surgery of the Stomach, and this has formed the foundation on which this book has been built, though the two authors hold themselves "jointly responsible" for every statement in the book. As to the general results of gastric surgery we may quote from a statement in the preface that one of the writers has in his private clinic had only one death in the last 75 consecutive operations, and that death was from accidental perforation on the twelfth day, and the other has had a series of 47 hospital and private cases with only three deaths.

The conditions for which operations may be performed on the stomach are numerous, but some of them are of much greater importance than others. Perhaps gastric ulcer and its complications may be looked upon as the chief morbid state which demands surgical aid, and we find in this volume 120 pages devoted to this subject. The etiology of gastric ulcer has always formed a favourite subject for the formation of theories, but it cannot be said that any theory hitherto suggested explains satisfactorily the occurrence of this ulcer. The prognosis of gastric ulcer is grave; according to Lebert death occurs in 10 per cent. of all ulcers—6½ per cent. from perforation and 3½ from hæmorrhage. Habershon says that perforation occurs in 18 per cent. of all gastric ulcers, and Müller considers that the mortality from hæmorrhage is 11 per cent., but others give it as less. Even if we adopt the lowest figures of the death-rate from gastric ulcer we find it large, and if we agree with Brinton in putting the mortality at 50 per cent. the result is appalling. There is here evidently a large scope for the work of the surgeon, though of course the medicinal and dietetic treatment is of great importance.

The best operative treatment for a gastric ulcer which has not yet perforated can hardly be said to be settled. Excision is, as a rule, unnecessary, but in some cases of bleeding ulcers it cannot be avoided, and also where there is so much induration that a suspicion of malignant disease arises. Gastro-enterostomy is, the authors tell us, the operation to be relied on in the treatment of ulcer of the stomach; it gives physiological rest to the organ by drainage. They prefer the posterior operation, the hinder wall of the stomach being united to the first part of the jejunum. The posterior operation is preferred as it is less frequently followed by vomiting. Pyloroplasty is useful in certain

cases, but it fails if the pylorus itself is ulcerated. It acts by providing free drainage.

The complications of gastric ulcer are very numerous; in this work we find a table containing 23 complications. One of the most important of these is hæmorrhage. Formerly it was often stated that "bleeding from the stomach the result of ulceration rarely proves fatal," but this opinion can hardly be held now. Surgical aid is required in most of the more severe forms and definitely after two severe hæmorrhages, for "experience tells us that further hæmorrhages are almost certain to occur unless preventive measures be adopted." The authors give a very good account of the technique of the operation for gastric hæmorrhage. In this connexion we may mention a very rare condition—namely, post-operative hæmatemesis. The authors point out that it occurs after operations for intestinal obstruction, tuberculous peritonitis, herniotomy, ovariotomy, and operations on the gall-bladder. Yet it is difficult to say to what it is due. Sepsis appears unlikely and the anæsthetic cannot be the cause as it has occurred when cocaine has been used. General treatment seems best for this condition, while the only two cases treated surgically by Reichard terminated fatally. The other important complication of gastric ulcer is perforation. The differential diagnosis in such cases here is often easy, as a history of previous gastric ulcer can be obtained in 92 per cent.; a case, however, is quoted in which there was a history of pain after food, but the symptoms which simulated perforation of a gastric ulcer were due to rupture of an ectopic gestation.

Perforation of a gastric ulcer demands immediate surgical treatment. After the ulcer has been sutured the peritoneal cavity has to be cleansed. The authors prefer flushing with sterile salt solution at 105° F., and they say that it should be continued until the fluid returns clear. The several peritoneal pouches need especial care. If, however, general septic peritonitis has developed, one or more free incisions may be made, and the intestinal coils are then withdrawn sufficiently to allow the operator to cleanse all recesses and folds with warm salt solution and gauze pledgets. In 20 per cent. two ulcers are present; therefore, after one ulcer has been found others should be looked for.

We are glad to see that attention is drawn to the importance of the bacteriology of the extravasated material. Only by differences in the organisms present can we account for many of the great differences in course which are met with.

The authors consider that the prognosis after perforation depends on four factors: (1) the condition of the stomach, whether full or empty; (2) the time elapsing between perforation and operation; (3) the size and number of the perforations; and (4) the presence or absence and the severity of the vomiting. As to the results, without doubt successful cases are much more likely to be recorded than those which end fatally, and therefore too much stress must not be laid on the statistics.

Probably the oldest operation on the stomach is gastrostomy, which the writers tell us was first suggested by Egeberg, a Norwegian military surgeon, in 1837, but it was really first performed by Becher as long ago as 1635. The method specially preferred is Frank's, as modified by Mr. Mayo Robson. When the patient is much reduced in strength cocaine anæsthesia is quite sufficient. In all, the authors have performed 26 cases of gastrostomy with only five deaths.

Dilatation of the stomach from atony was until recently practically beyond treatment, either medical or surgical. Bircher, in 1890, reported three cases treated by gastroplication, and many others have since been performed. One of the authors, Mr. Moynihan, in 1898 described an ingenious method of gastroplication, and the results in the three cases in which the writers have employed it have been satisfactory.

There are many other matters dealt with in this volume which are of both interest and importance, but we think we have said enough to show the character of the work. It is eminently practical and should prove of value to all those, both physicians and surgeons, who are interested in the modern treatment of diseases of the stomach.

Annual and Analytical Cyclopædia of Practical Medicine. By CHARLES E. DE M. SAJOUS, M.D., and 100 Associate Editors. Illustrated with chromo-lithographs, engravings, and maps. Philadelphia, New York, and Chicago: F. A. Davis. 1901. Pp. 1043.

THIS volume forms the last of the first series of the present work. It contains subjects coming under the heading of titles commencing with the letters R to Z, or, to be more exact, from "Diseases of the Rectum" to "Zinc." The promises enumerated in the preface to the first volume of the series have been well fulfilled, as is proved by reference to the voluminous index given at the end of the present volume. The whole publication forms a mass of literature probably never before brought together within the limits of six books.

The work presents "all the general diseases usually described in text-books," in addition to the main progressive features which have been furnished by the past decade. Surgical subjects have been given space corresponding with their practical importance. As regards "therapeutics," the subjects considered represent the remedies still more or less used, our text-books being replete with agents which may be said to be obsolete from the fact that they have been replaced by others of far greater efficacy.

The present volume contains a large number of valuable articles, though we have not space to comment at length on any of them. Particularly valuable contributions are those on Diseases of the Stomach, by Professor D. D. Stewart of Philadelphia; on Diseases of the Spinal Cord, by Dr. W. B. Pritchard of New York; on Syphilis, by Professor G. F. Lydston of Chicago; on Wounds and Injuries of the Chest, by Professor L. A. Stimson and Dr. E. L. Keyes, jun., of New York; and on Yellow Fever, by Surgeon-General Wyman of Washington. By the way, we cannot agree with Dr. Leveson of Copenhagen, who contributes a paper on Rheumatism, when he adopts "chronic articular rheumatism" and "rheumatoid arthritis" as synonymous terms.

LIBRARY TABLE.

A Manual of Minor Surgery and Bandaging for the Use of House Surgeons, Dressers, and Junior Practitioners. By CHRISTOPHER HEATH, F.R.C.S. Eng., LL.D. Montreal, Consulting Surgeon to University College Hospital, and Emeritus Professor of Clinical Surgery in University College, London. Twelfth edition. Revised by BILTON POLLARD, F.R.C.S. Eng., Surgeon to University College Hospital and Teacher of Operative Surgery in University College, London. London: J. & A. Churchill. 1901. Pp. 426. Price 6*s.* 6*d.*—The many medical men who have learnt their bandaging and minor surgery from this little volume will feel no surprise at hearing that the work has reached a twelfth edition, for it thoroughly deserves such long-enduring success. Its clearness and accuracy are known to many generations of students. The old cause for fear when a book passes through many editions is that sufficient care may not have been taken to keep it up to date. In this case such fear is groundless, for Mr. Heath has entrusted to Mr. Bilton Pollard the task of preparing this edition and the work has been done well. The account of the methods of asepsis and antisepsis especially is good. We know of no book which is likely to prove more useful to a recently appointed house surgeon than this; it will be of assistance in many difficulties and may save him from many mistakes. The

present edition is fully worthy of those which have preceded it.

A Practical Treatise on Genito-Urinary and Venereal Diseases and Syphilis. By ROBERT W. TAYLOR, A.M., M.D., Clinical Professor of Venereal Diseases at the College of Physicians and Surgeons (Columbia University), New York; Surgeon to Bellevue Hospital, &c. Second edition, thoroughly revised, with 138 Illustrations and 27 Plates in Colours and Monotone. London: Henry Kimpton. 1901. Pp. 722. Price 25*s.*—It is a little difficult to see why the title of this work apparently excludes syphilis from being a venereal disease; probably the intention is merely to draw attention to the fact that syphilis is included in the volume. The work has, the author tells us, been written to occupy a position midway between an encyclopædia and an epitome, and we think that Dr. Taylor has been successful. The book is quite abreast of the present-day knowledge of these important subjects, and the treatment is sufficiently full to enable a medical man to carry it out satisfactorily, while no space has been wasted on the description of obsolete methods. This is a decided gain, for the number of methods now employed is so large that no time can be devoted to processes which have been rejected as useless or unsatisfactory. The account of gonorrhœa and its complications is especially good, and we thoroughly agree with the author's description of many of the methods of treating gonorrhœa as "fads." He points out that most of these methods which are supposed to "abort" gonorrhœa in five or 10 days leave an infectious mucous discharge. The illustrations are good, especially those which are coloured. We consider that this new edition can be confidently recommended as complete and trustworthy.

Photographic Atlas of the Diseases of the Skin: a Series of 80 Plates, comprising more than 100 Illustrations, with Descriptive Text, and a Treatise on Cutaneous Therapeutics. By GEORGE HENRY FOX, A.M., M.D., Clinical Professor of Diseases of the Skin, College of Physicians and Surgeons, New York, &c. In 12 parts. Parts V. to XII. Philadelphia and London: J. B. Lippincott Company. 1901. Price 6*s.* each part.—We have already expressed a very favourable opinion on the first four parts of this work, and the succeeding eight parts are equally satisfactory. They will form, when the issue is complete, an excellent atlas of cutaneous disease. The chief objection to the photographic representation of skin diseases is the tendency for the reds to come out black on account of the small actinic power of red light. In these plates this difficulty has been in great measure obviated and the results are very good indeed. The text and the remarks on treatment are all that could be desired.

Etudes de Clinique Chirurgicale. Par le Dr. ANTOINE PACHECO MENDES, Professeur de Clinique Chirurgicale à la Faculté de Médecine de Bahia. Avec 26 figures dans le texte dont 4 en couleur. Paris: Librarie Médicale O. Berthier. 1901. Pp. 200.—There is a fairly well-known school of medicine at Bahia—in fact, it may be said to be one of the chief medical schools of South America; but in this country comparatively little is heard of the work done there, and this must be attributed chiefly to the fact that Portuguese is very little known here. The volume before us is written in French and therefore appeals to a larger circle of readers. Dr. Mendes has put together a number of interesting observations which he has made in his clinic, and he tells us that he hopes to publish another volume when he has accumulated a sufficiency of new material. There are 22 sections in the book and each deals with a single subject. We may mention a few of the more important. The first is on the Employment of Sulphur in Local Tuberculosis. The author expresses himself as very well pleased with this substance when used after scraping, and he draws especial attention to the little likelihood of return of the disease when sulphur is employed. He cites many cases in which the use of sulphur was followed by recovery, but he utters a warning that the application of sulphur is by no means painless. A valuable article is concerned with Aneurysm of the Gluteal Artery. It contains a table of 50 cases which the author has collected. In some of the cases, however, the aneurysm appears to have been connected with the sciatic artery. Dr. Mendes is in favour of extirpation of aneurysms, not merely in the gluteal region, but wherever situated. The author also describes a method of removing hæmorrhoids which is not absolutely new, but has been very little used. It consists in dissecting up the mucous membrane from the pedicle of the hæmorrhoid, tying the pedicle with catgut, then fashioning two small flaps from the mucous membrane, removing the pile and suturing the flaps together. Every one of the subjects discussed is treated in a novel manner and we may look upon this little book as a distinct contribution to surgical literature.

Essentials of Gynæcology (Arranged in the Form of Questions and Answers). By E. B. CRAGIN, M.D., and FRANK S. MATHEWS, M.D. Fifth edition, thoroughly revised. With 57 Illustrations. London: Henry Kimpton. 1901. Pp. 207. Price 4*s.* net.—This volume, of the series known as "Kimpton's Student's Essentials," should be of some value to the students of gynæcology. The book is in no sense to be considered as complete, but is intended to assist the student in a review and summary of work done. It has reached a fifth edition and we may conclude is bought and used. For such men as are unable to attend the excellent tutorial classes now held in all large hospitals the book will, no doubt, prove valuable, and, indeed, it may prove suggestive even to the teacher of such classes in providing him with a number of suggestive elementary questions.

A Manual of Obstetrics. By A. F. KING, M.D. Eighth edition, revised and enlarged. With 264 Illustrations. London: Henry Kimpton. 1901. Demy 8vo. Pp. 612. Price 12*s.* 6*d.* net.—We need say but little about a book which has reached its eighth edition, since this fact alone is sufficient to demonstrate its excellence. As only two years have elapsed since the appearance of the last edition of Dr. King's "Manual of Obstetrics" very slight alteration has been required. The chief addition consists of 41 new illustrations which have been selected from the works of American authors. Although, as the author points out, the book remains elementary, no attempt having been made to develop it into a systematic text-book, yet it is steadily growing in size. The present edition contains 612 pages, as compared with 574 pages in the last edition. The book is, on the whole, well up to date, and we can recommend it as a good example of an elementary manual of obstetric medicine.

Practical Radiography. By A. W. ISENTHAL, F.R.P.S., and H. SNOWDEN WARD, F.R.P.S. Third Edition. Published for the Photogram, Limited, by Dawbarn and Ward, Limited, 6, Farringdon-avenue, London, E.C. 1901. Pp. 198. Price 6*s.*—This is a well-printed and well-illustrated book which may be placed in the hands of the beginner in x-ray work with confidence. The authors have dealt with their subject in a very methodical way, beginning with a historical review of the subject and finishing with a short and authoritative account of the new fields of research which have been opened up by Roentgen's remarkable discovery. The wonderful phenomenon of radio-activity, manifested by certain elements and amongst them some entirely new ones, is described. In general, however, the book will serve best as a practical guide, the apparatus and accessories being clearly described. It is evident that the writers are perfectly

familiar with the practical sides of the subject, including photography and electricity, recording their experience as to the best manner of operating and as to the most suitable and effective apparatus for the purpose. The book will be found very useful by medical men.

JOURNALS AND MAGAZINES.

The Practitioner.—An adequate series of articles upon Hypertrophy and Dilatation of the Heart forms the bulk of the *Practitioner* for January. The subject is fairly conclusively discussed by the various articles taken *en masse*, but, as must inevitably happen when several writers are engaged upon the same subject in the same journal without an opportunity presumably of seeing each other's contributions beforehand, there is a tiresome amount of repetition. Professor T. C. Allbutt's article is admirable both in matter and, as is always the case with this writer, in the manner of putting it forward. Such discourses repay perusal for their style even if they give no novel information. In this case the writer speaks, as does Dr. William Collier of Oxford, from a position of peculiar advantage upon the question of heart strain and athletics. Professor Allbutt's opinion leans strongly to the view that exercise, pure and simple, rarely damages the heart, and that toxic influences, such as those from tobacco and alcohol, are the enemies to be avoided with the greatest diligence. In contrast to Professor Allbutt's view is that of Dr. I. Burney Yeo who states that "it is now quite common to meet conditions of grave cardiac strain from excess of muscular efforts in athletic contests." Professor Allbutt, however, is himself severely critical of excessive athletics for young boys, and gives an interesting instance of the evil effects that may arise. Readers will expect to find in these articles a careful consideration of the Nauheim treatment and they will not be disappointed. The class of case in which exercises and baths are to be recommended or withheld is discussed particularly by Dr. Burney Yeo and Dr. Richard Caton. Dr. A. E. Sansom contributes an interesting but diffuse article on Recent Study and Treatment as regards Hypertrophy and Dilatation. The medico-literary causerie consists of a comprehensive historical review of quackery.

Analytical Records
FROM
THE LANCET LABORATORY.

(1) "TABLOID" HYDRARG. PERCHLOR., GR. 1/20TH, ET POTASS. IODID., GR. 5; AND (2) "ENULE" MORPHINE AND BELLADONNA.

(BURROUGHS, WELLCOME, AND CO., SNOW HILL BUILDINGS, LONDON, E.C.)

IN those cases in which the continued administration of mercury with iodide of potassium is required the "tabloid" containing exact quantities of these salts is useful. We find that this tabloid dissolves readily in water and we are able to state that the salts are present in the precise amounts indicated. The tabloids are serviceable when regularity of treatment is important. A new formula has recently been added to the list of "enule" rectal suppositories of this firm: morphine hydrochloride, ¼ gr., and extract of belladonna, ¼ gr. The enule consists of a hermetically-sealed sheath of pure tinfoil which effectually protects the contents from deterioration or from outside contamination. The combination is, of course, sedative and anodyne, on which account it is useful in irritable conditions of the rectum.

PLASMON BUTTER.

(INTERNATIONAL PLASMON, LIMITED, 66A, FARRINGDON-STREET, LONDON, E.C.)

The admixture of plasmon with butter must be regarded as a sound physiological procedure, since both are important nourishing constituents of normal milk. The mixture so obtained has also the advantage of possessing a very attractive taste. When plasmon—that is to say, the unaltered proteid of milk—is added to butter in a special way it endows it with a rich creamy flavour not unlike the flavour of Devonshire clotted cream. In appearance also plasmon butter resembles clotted cream. We have examined both plasmon butter and the ordinary butter used for making the mixture. The following are the results of the analysis: plasmon butter moisture, 41·20 per cent.; butter fat, 51·50 per cent.; dry plasmon, 6·58 per cent.; salt 0·72 per cent.; ordinary butter mixed with plasmon—moisture, 9·92 per cent.; fat, 87·71 per cent.; curd, 1·76 per cent.; and salt, 0·61 per cent. The addition of a proteid (identically in the same condition chemically and physiologically as in milk) to butter affords undoubtedly a valuable dietetic combination, and more especially for invalid purposes in which powerful nutritives are indicated. The Plasmon is introduced in the form of jelly. About 15 per cent. of Plasmon jelly is added to the butter. Plasmon butter is pleasant to take and should prove an excellent substitute for cod-liver oil. It contains both a proteid and a fat of a highly assimilable character, each of which, moreover, favours the nutritive processes. We have received also a copy of the Plasmon Cookery-book, containing a great number of recipes in which Plasmon is employed with undoubted dietetic advantages. Directions for preparing a great variety of dishes are given.

CARICA COCOA.

(PUCKA COFFEE CO., 30, GALLOWAY-STREET, MAXWELLTOWN, DUMFRIES.)

The distinguishing feature of this cocoa is that it contains a vegetable enzyme and on this account the preparation is regarded as being of an easily digestible character. It is difficult to see how the cocoa can be favourably modified by the addition of a digestive ferment the activity of which is destroyed by boiling water. If an infusion of this cocoa were first maintained at blood temperature for some time before cooking some digestive action would probably take place. The cocoa used is of excellent quality and flavour and has evidently undergone some special preparation, as the amount of mineral matter is excessive and the alkalinity is decidedly high. Our analysis gave the following results: moisture, 4·63 per cent.; mineral matter, 8·66 per cent.; fat, 31·95 per cent.; and non-nitrogenous proteid and fibre, 54·76 per cent. The alkalinity of the mineral matter was equivalent to 2·8 per cent. of potash (calculated as K_2O).

AQUARIUS WATER SOFTENER.

(THE LONDON AND GENERAL WATER PURIFYING CO., 157, STRAND, LONDON, W.C.)

We find by analysis that the ingredient of this powder is well adapted for the purpose of rendering hard water soft. The addition of the powder, however, only removes the hardness due to carbonate of lime dissolved in carbonic acid gas and not that which may be due to sulphate of magnesium or of calcium. In short, the addition of the powder removes temporary hardness to the same degree as would continual boiling. The powder, however, is very convenient for the purpose. Used in the proportions indicated it would do no harm, adding nothing to the soluble constituents of the water and eliminating the chief source of hardness.

"BISPEP."

(MUNDY, MAHONE, AND CO., 36, PARADISE-STREET, BIRMINGHAM.)

The formula of this preparation is very well known. It contains aromatics, bismuth, and ammonia carbonate, pepsin,

&c. Its action, therefore, combines that of an antacid, carminative, and anti-fermentative. We recognise no particular merit about this preparation. It would undoubtedly be of service in some cases while in others it might easily be contra-indicated. Its indiscriminate use, therefore, is to be condemned, and the words on the label describing the list of ailments it is said to remove are highly exaggerated and misleading.

LOMBARDY BUTTER.

(F. CORTI AND CO., 45, GERRARD-STREET, LONDON, W.)

A feature of this butter is the small percentage of water which it contains, the question of the amount of water in butter being very much in evidence just now. It is proposed to fix a limit, and we believe that the consensus of opinion is in favour of 16 per cent. of water as a maximum amount. As our analysis shows, this specimen of Lombardy butter contains not more than three-fourths of this proportion. On the large scale there is no difficulty in producing butter containing less than 15 per cent. of water, but in isolated instances (as in the case of a small farmer) the reduction of water to this limit is not so simple. We found the Lombardy butter of good quality and flavour. It yielded results characteristic of butters of known purity. Thus it yielded a maximum proportion of volatile fatty acids, a high Reichert figure being obtained. The Valenta test also gave a satisfactory result. Further analytical results were as follows: water, 12·86 per cent.; butter fat, 85·83 per cent.; curd, 1·21 per cent.; and salt, 0·01 per cent. A small addition of borax has been made.

VYTALLE OIL.

(THE VYTALLE OIL CO., LIMITED, 465, BATTERSEA PARK-ROAD, LONDON, S.W.)

Vytalle Oil is a clear yellow oil, limpid at ordinary temperatures. It possesses a bland flavour suggesting a very mild butter. It is described as a mixture of pure vegetable oils. From our examination and the physical constants which we obtained olive oil would appear to be the predominating constituent. Thus the Valenta test gave 79° C. as the point of interfusion, while the Maumêne test gave a temperature of 49° C. The specific gravity of the oil at normal temperature was 0·917. From the fact, as we found, that the oil is very readily saponified it may be concluded that it is easily assimilated and there is, therefore, some ground for urging its claims as a substitute for cod-liver oil. It is not unpleasant to take and it does not give rise to disagreeable eructations.

"ANTIFIÈVRES" (ROBERT).

(AGENCY: GILBERT KIMPTON AND CO., 19, ST. DUNSTAN'S-HILL, LONDON, E.C.)

This preparation is described as a radical cure for fever. It is a strongly acid brown fluid with a disagreeable smell resembling in part sour beer and in part chicory infusion. No definite chemical principles could be identified. It contained neither quinine nor arsenic. There was some alcohol present. The fluid yielded 5·63 per cent. of syrupy extract and 0·74 per cent. of mineral salts, consisting principally of alkaline salts corresponding in nature with those commonly yielded by vegetable extracts. We have not been able to find any satisfactory clinical evidence respecting this "radical cure."

(1) BANANA MALTED FOOD (BOYD); (2) PINE HOP-BITTERS (BOYD); AND (3) ANTISEPTIC EAU-DE-COLOGNE (BOYD).

(MEDICAL AND GENERAL SPECIALITIES CO., 300, CLAPHAM-ROAD, LONDON, S.W.)

Odd as it may appear, the banana malted food consists chiefly of cooked wheat-flour according to our microscopic examinations. The food is rich in phosphates, a fact which would account for the total mineral matter reaching as high a figure as 2 per cent. The preparation contains a good proportion of proteids, carbohydrates, and phosphatic constituents in well-planned ratio, and the method of manufacture is calculated to render these elements easily assimilable. Pine hop-bitters is a somewhat curious compound, containing, amongst other things, the fresh juice of the pineapple, cinchonidine, and sodium persulphate. This sodium salt is said to be a powerful stimulant to the appetite, and on this account might be given to tuberculous patients. Sodium persulphate certainly acts as an anti-fermentative and has been employed in the treatment of hyper-acidity. Antiseptic eau-de-cologne contains a well-known but somewhat irritating germicide. It is stated also to contain peroxide of hydrogen but we could find none. We are not surprised at this result since peroxide of hydrogen is not compatible with a powerful reducing agent.

Looking Back.

FROM

THE LANCET, *SUNDAY, JAN.* 25, 1824.

What I would do if I had strangulated hernia would be this, I would have the taxis employed steadily for ten or fifteen minutes, if this did not succeed, I would be bled to syncope, and then have the reduction by the hand attempted again; if this also proved unsuccessful, I would have the tobacco injection, and wait a short time; and then, if necessary, have the operation performed; it is the most egregious ignorance possible, to delay the operation so long as is often done, thereby wasting those precious moments which, if properly used, might have been spent in saving the life of the patient; ask those about our hospitals who are the persons who die from strangulated hernia? and they will tell you those who have the operation delayed three or four days, and are not brought to the hospital till three days after the hernia has been strangulated, and then if operated on, they often die: the delay is the cause of the danger, and not the operation. I have had a little personal experience of this complaint, and have devoted no small share of my attention to it, and I would not wait more than twelve hours, if the tobacco enema and other means had been employed. Now let me allude to the case of a late illustrious Nobleman, (I am almost afraid now to mention names—*laugh*), who died of this disease; he was in the country, and during his stay there, had strangulated hernia, he was attended by a person of strong mind, and who had studied his profession with industry; he offered to perform the operation, but it was delayed, on the ground that London skill and advice should be obtained; but before this could be had, the Nobleman died: I do not mean to under-value London skill, but it certainly is great folly to delay in this complaint. I would propose the operation, and perform it readily if it was agreed to; but if not, I would wash my hands of the affair, and be freed from the consequences.*

ST. THOMAS'S HOSPITAL.

Jan. 23d. No operations have been performed here this week.

The accidents that have been admitted are a fracture of the patella, of the tibia and fibula, an injury to the hand, fracture of the ribs, and a burn.

* Excerpt from report of a lecture on hernia delivered by Sir Astley Cooper in the Theatre of St. Thomas's Hospital on Wednesday evening, Jan. 21st, 1824.

CONGRESS OF THE SANITARY INSTITUTE, MANCHESTER, SEPT. 9TH–13TH, 1902.—President: the Right Hon. the Earl Egerton of Tatton. Section I.—Sanitary Science and Preventive Medicine—will be presided over by Sir J. Crichton Browne, LL.D., F.R.S. Section II.—Engineering and Architecture—will be presided over by Sir Alexander Binnie, M. Inst. C.E. Section III.—Physics, Chemistry, and Biology—will be presided over by Professor A. Sheridan Delépine, M.B., C.M., B.Sc. Eight technical conferences will also be held in connexion with the congress.

THE LANCET.

LONDON: SATURDAY, JANUARY 25, 1902.

First Aid and Hæmorrhage.

A LETTER which appeared in THE LANCET of Jan. 4th (p. 54), written by Mr. W. G. SPENCER, raises a very important point. Mr. SPENCER states that the teaching at ambulance classes with regard to the arrest of hæmorrhage appears to result in impressing upon the minds of the pupils that in any case of hæmorrhage some sort of improvised tourniquet must be applied above the bleeding-point and that the value of direct pressure is not recognised. He quotes sundry instances to show that owing to this method of procedure even death has occurred in circumstances where life ought to have been preserved.

First-aid classes have undoubtedly done much valuable work and probably many a simple fracture has been kept from conversion into a compound fracture by the application of first-aid measures for procuring temporary immobility. But although the lectures may be sound, yet many of the hearers are, after having been taught, afraid to exercise their common-sense. In many books which have been published upon first-aid and ambulance work the directions for the arrest of hæmorrhage are classified under those appropriate for arterial, venous, and capillary hæmorrhage. For the last class pressure over the wound is always advised, but for the first two pressure above or below the wound is insisted upon as the main treatment, while pressure over the wound is relegated to a secondary position. In books classification is presumably necessary, yet in practice a wound sufficient to cause alarming hæmorrhage is rarely to be included in only one of the above categories. The commonest example of a wound producing only one kind of hæmorrhage is a wound of a varicose vein in the leg. In this class direct pressure is assuredly indicated, because when a varicose vein gives way the hæmorrhage comes both from the proximal and the distal portion of the vessel—in fact, much more from the proximal than from the distal. The common forms of severe cuts, which as a rule affect the fingers, hands, or arms, produce capillary and venous hæmorrhage, although in the fingers a digital artery may be divided, or in the wrist the ulnar or radial artery, but in both cases the superficial veins and the venæ comites are divided also. Severe punctured wounds, if they divide a deep-seated artery, almost invariably sever or puncture the vein as well, a condition of things which again demands the application of direct pressure.

To solve the problem of the correct treatment of hæmorrhage we must go back to general surgical principles. In the first place we must distinguish the hæmorrhage after wounds of vessels in their continuity from that due to the complete removal of a part of a limb. In the latter case there is no room for doubt that a firmly applied tourniquet is the only method of rapidly controlling the extensive hæmorrhage which is generally present. But far otherwise is it with a wound of a vessel, whether artery or vein, in its continuity. In all surgery the simplest means that are efficient should have the preference. The pressure of a finger can control the hæmorrhage from any vessel in the body if the pressure be applied at the wounded spot. That the pressure should be applied at the wound in the vessel has been a fixed principle of surgery for very many years. And not the temporary means only for arresting the hæmorrhage, but the permanent means also act with most certainty when applied at the wound in the vessel. Neglect of this rule has led to many errors. That it is possible to control the blood-flow from a wounded artery by the application of a tourniquet higher up is undoubtedly true, and when carefully applied the tourniquet is of great value during any operative procedures which may be undertaken. But if a tourniquet is carelessly or ignorantly applied it is certainly capable of leading to loss of far more blood than it saves. As a tourniquet is being applied (and we are speaking of improvised tourniquets and not of some special instrument) its first effect is to arrest the flow of blood in the veins at the point of application, because the blood-pressure in the veins is very much less than is the blood-pressure in the arteries. As the blood-flow in the arteries is not yet arrested, the normal quantity of blood will enter the limb, but hardly any can leave it by the veins, therefore the hæmorrhage will be much more profuse than if no tourniquet had been applied. As the pressure exerted by the tourniquet increases it is able to compress the arteries somewhat so that the quantity of blood entering the limb is diminished, but still no blood can leave the limb by the natural channels, and therefore still the amount of blood lost is greater than it would otherwise be. It is only when the instrument compresses the arteries that hæmorrhage from the wound ceases. Now, the pressure required to compress an artery if applied directly to the vessel is by no means great, but when the pressure is exerted by constricting the whole limb it needs to be very much greater, and it is probable that the requisite degree of pressure is very seldom attained by amateur efforts, even though the operator is well instructed in ambulance work. As to the instruction which should be given to an ambulance class there can be no doubt. For all ordinary wounds hæmorrhage is best controlled by direct pressure on the wounded spot; the finger is the simplest and handiest means of applying pressure and should be used until a pad can be prepared and applied. If the pad controls the hæmorrhage well and good, if not the pressure of the finger on the spot should be resumed.

We have little fault to find with the instructions for the arrest of hæmorrhage laid down in the manual issued by the St. John Ambulance Association. The only suggestion that we would make is that it would be well to simplify the directions. As they stand they are too numerous and too elaborate to be called readily to mind in the excitement of an accident. It is impossible to train the average students of an ambulance class to act as skilled surgeons in a moment of emergency; the most we can expect is to instruct them so that they may, by the application of a few simple rules, avert immediate death or unnecessary increase of the danger of the accident.

No one could have a higher opinion of the value of first-aid than we have, for we are sure that it may be the means of saving many limbs and even many lives, but the instruction must be given with a due appreciation of the intelligence and knowledge of the learners. This, as some of the correspondence called forth by Mr. SPENCER'S letter—notably Mr. HAMILTON WHITEFORD'S communication—shows, the Manual of the St. John Ambulance Association does not always allow for.

The Public Health Act and the Spread of Disease.

IT would seem that the number of persons who while suffering from an infectious disease do not scruple to mingle with the general public or who allow persons under their charge to commit the same serious offence, is increasing. Within the last three months many offences of this kind have come prominently under our notice, only a few of which we have been able to record. At any time such a state of things would be alarming, but while an epidemic of small-pox is raging alarm must be necessarily increased. It is true that such offences have been provided for in the Public Health Act, but some of our magistrates do not seem to comprehend the gravity of the offences. For example, a fine of 2*s*. 6*d*. only was exacted recently from a woman who exposed her child while suffering from scarlet fever, and 10*s*. in each case was the penalty that another woman had to pay for exposing her infectious child on two occasions, though the magistrate remarked that the exposure had probably been the means of infecting other persons. On Oct. 15th, 1901, in the East-end of London, it was mentioned at an inquest[1] that seven persons in one family in one house were suffering from small-pox without being medically treated, and that one of the family, a lad, on being told to remain in the house until the medical officer of health had been sent for to confirm the diagnosis of small-pox, had left the house and gone to work in a coal-yard. The coroner incidentally remarked at the same inquest[2] that a woman had that day been found drunk in the streets while suffering from small-pox. Many striking instances of persons engaging in every-day occupations while suffering from infectious diseases, and especially from small-pox, have since been brought to our notice. The offender is sometimes ignorant of the fact that he is infectious, but that is another question. This is not at all usual and accounts for a very small percentage of the cases where the public health is endangered by the exposure of infectious persons. That the greatest watchfulness on the part of sanitary authorities is necessary is well illustrated by the outbreak of small-pox at Ystalyfera in South Wales. The patient who conveyed the infection from London is believed to have travelled from London to Swansea by train and from that place, again by train, to Ystalyfera. She must necessarily have come under the observation of many officials, none of whom seem to have detected that there was anything suspicious in her plight.

We cannot therefore wonder at the spread of disease in spite of the most strenuous efforts of medical officers of health and sanitary reformers. Nor do the ridiculously small fines imposed by magistrates on offenders against the law tend to improve matters. Ignorance of the law is no excuse in the eye of the law, though ignorance and poverty may sometimes account for the smallness of the fines imposed. The sections of the Public Health Act of 1891 in dealing with the matter state that: "If any person while suffering from any dangerous infectious disease wilfully exposes himself without proper precautions against spreading the said disease in any street, public place, shop, or inn; or, being in charge of any person so suffering, so exposes such sufferer; or gives, lends, sells, transmits, removes, or exposes without previous disinfection any bedding, clothing, or other articles which have been exposed to infection from any such disease, he shall be liable to a fine not exceeding £5." In the case of a person knowing himself to be suffering from a dangerous infectious disease engaged in any occupation in a manner likely to spread the disease the maximum penalty is £10, and the same maximum penalty applies to the driver of a public conveyance who knowingly conveys a passenger suffering from an infectious disease and also to the person being so conveyed if he himself is aware of the fact that he is so suffering. Where poverty and ignorance are factors in the case magistrates may perhaps be forgiven for erring on the side of leniency, but where, as in a recent case, a man can afford to travel the whole length of England, while suffering from scarlet fever, to escape from the jurisdiction of the sanitary authorities, a fine of 40*s*. is hardly adequate. Nothing but the severest punishment will ever prevent such selfish people from defying the law. With regard to offenders who belong to the poorer classes something, we think, might be done if more publicity were given not only to the Act but to the consequences of violation of the law in regard to health.

A common motive which prompts the poor to conceal disease is a pecuniary one, for sickness in their homes may mean nothing less than loss of employ for the bread-winners, be they wives, husbands or children. But the poorer classes are more susceptible to reason than we often give them credit for, and if in some way the position could be made clear to them much benefit both to them and to the general public might follow. Force is, perhaps, necessary to carry out the law for the general good in certain cases, but blind obedience without a reason is not a trait in the Englishman's character whatever place on the social ladder he may occupy, and the experiment of educating the poor in matters which affect the public health by teaching them the reason of sanitary orders and laws might well be given a trial. How this could best be effected other than by the publication of hand-bills and public notices is a matter for consideration. A suggestion has been made to us that senior medical students should visit the poor and in temporal matters impart to them a certain amount of instruction akin to that which it is the province of the minister to give in a spiritual capacity? There is point in the suggestion, but we fear that the number of senior medical students willing to give the time and dowered with the proper amount of tact and sympathy is not very large. Medical students are young

[1] THE LANCET, Oct. 19th, 1901, p. 1058.
[2] THE LANCET, Oct. 26th, 1901, p. 1169.

men, and while possessing the necessary knowledge would be likely not to have quite the qualities that would make it easy for them to impart their knowledge effectively. In our opinion the proper channel for such instruction to the people is the popular press. The editors who will arrange regularly to instruct their less educated readers in the principles and practice of sanitary legislation will be engaged in a really beneficent work.

A Magistrate and Scientific Witnesses.

THE *Daily Telegraph*, in its report of a case heard before Mr. SHEIL at the Westminster Police-court, records certain observations of the learned magistrate to which we venture to take exception. The prosecution was for adulteration under the Sale of Food and Drugs Act, and Mr. SHEIL had been informed that some technical objection was to be taken to the analyst's certificate. Presumably this objection was not upon a point of law, for it seems to have provoked the following remarkable outburst, which is apparently given verbatim:—"Mr. SHEIL: Of course, you can get as many experts on either side as you like by paying their fees. (Laughter.) Any number of learned scientific gentlemen will swear one thing, and an equal number of learned scientific gentlemen retained on the other side will swear to the contrary. (Laughter.)" These observations had, as will be seen, the effect much desired by so many of those who sit on the judgment-seat in this country of raising a laugh among the audience that loves to hang about law courts, and to the full approval of his "gallery" Mr. SHEIL is no doubt entitled. He is not, however, entitled to approval from those who do not desire to see the proceedings in a court of law interrupted by cheap sneers at members of learned professions—at gentlemen, that is, whose aid is invoked by lawyers in order that truth may be arrived at in difficult inquiries. That scientific witnesses frequently differ from one another everyone knows. Let us take a simple instance more or less of everyday occurrence. The surgeon who is called in to attend upon a man who has been injured by the negligence of another, and who afterwards supports his patient's claim for damages, expects to find that a surgeon representing the negligent defendant may take a less gloomy view than himself of the duration of the victim's symptoms. One surgeon is in court to inform the jury of the term during which the defendant may be incapacitated, the other is there to point out his chances of early recovery; and after both have been cross-examined the jury is expected to decide the question—to whose evidence should most weight be attached? In cases that are heard at police-courts witnesses on different sides may differ in opinion as to the amount, for example, of boric preservative that may be added to an article of diet without injury to the consumer. Each witness will be genuinely convinced of the accuracy of his own view and may from his own point of view be entitled to have weight attached to his opinion, but the questions upon which he has given his testimony are questions to a large extent of opinion, and his answers are given as opinions and nothing more upon a topic with regard to which no one can speak with certainty. And if these questions of opinion are regarded as questions of fact it must be remembered that upon simple questions of fact, such as the identity of a person or the time at which an event happened, mistakes are frequently made by witnesses who are neither learned nor scientific and of whose good faith there can be no question. We recommend Mr. SHEIL on the next occasion upon which he is inclined to level discourteous taunts at the head of members of learned professions and callings to recall the days when he was a practising member of a learned profession himself. He will remember that lawyers belong to the profession which of all others permits its members to take a side for hire. We do not sneer at the legal profession—we recognise that advocacy is the *raison d'être* of many of its members; but we remind Mr. SHEIL that when he talks glibly of the experts of science we are entitled to ask—What about the experts of the law? We take it that in some cases at all events that come to the law courts for decision the litigant who is destined to meet defeat has been strongly advised by eminent and perfectly honest counsel before he embarked in litigation that his claim or his defence was a sound one. Or should we say in turn that "any number of learned legal gentlemen will advise one thing and an equal number of learned legal gentlemen retained on the other side will advise to the contrary"? We have no desire or intention to make any statement that would be both discourteous and untrue. It will be remembered also that we do not assert that scientific witnesses never differ in their evidence and never allow themselves to be influenced by prejudice. It is against the sweeping charge of wholesale flagrant venality and perjury that we protest.

The Isolation of Small-pox Patients.

THE spread of small-pox or any other infectious disease which demands the isolation of patients for the benefit of the community necessitates a careful study of the Acts under which local authorities are entitled to order the removal of sufferers from their homes. A proper appreciation of the rights and duties of the local authority is necessary both from the point of view of the medical officer of health and the medical practitioner and from the standpoint of the public. Forcible removal of a suspected patient to a hospital ship unless carried out by sanction of law might give rise to an action for false imprisonment; it will be well therefore to remind our readers of the law upon the subject in so far as the interests of medical officers of health and private practitioners are affected, indicating the scope of their duties, and in what way they are protected from liability in their private capacities.

The text of Section 124 of the Public Health Act, 1875, which may be regarded as the leading statutory enactment dealing with this important matter, reads as follows:—

"Where any suitable hospital or place for the reception of the sick is provided within the district of a local authority, or within a convenient distance of such district, any person who is suffering from any dangerous infectious disorder, and is without proper lodging or accommodation, or lodged in a room occupied by more than one family, or is on board any ship or vessel, may, on a certificate signed by a legally qualified medical practitioner, and with the consent of the superintending body of such hospital or place, be removed by order of any justice to such hospital or place, at the cost of

the local authority; and any person so suffering who is lodged in any common lodging-house, may, with the like consent and on a like certificate, be so removed by the order of the local authority.

"An order under this section may be addressed to such constable or officer of the local authority as the justice or local authority making the same may think expedient; and any person who wilfully disobeys or obstructs the execution of such order shall be liable to a penalty not exceeding £10."

The powers conferred upon local authorities by this section were extended by Section 4 of the Canal Boats Act, 1877, to any sanitary authority within whose district a canal or any part of a canal may be situate in order to permit the removal of infectious cases from canal boats. The section was also extended to ships by the Public Health (Ships, &c.) Act, 1885, Section 2 and Schedule. It will be seen that in substance this Section 124 confers a power of removal upon local authorities acting in accordance with the certificate of a medical practitioner when the infected person:—(1) is without proper lodging or accommodation; or (2) is lodged in a room occupied by more than one family; or (3) is on board a ship or canal boat; or (4) is in a common lodging-house.

The responsibility of the certifying practitioner becomes apparent when it is pointed out that the determination of what is "proper lodging or accommodation" rests with him. In deciding this question he is apparently entitled to take into consideration the danger of infection to others. In the case of WARWICK *v.* GRAHAM,[1] the facts were that the respondent's son was suffering from scarlet fever at his father's house where a family of eight persons, including the patient, resided. The house contained four rooms. The patient occupied one room and had proper lodging and accommodation so far as he himself was concerned, but he could not be sufficiently isolated to prevent danger of infection to other inmates of the house who had to pass the door of the sick-room. The patient was properly cared for. The medical officer made a certificate under the Public Health Act for the removal of the patient, but the justices refused to make an order on the ground that there was not sufficient evidence to show that the patient was without proper lodging and accommodation within the meaning of the section. It was decided by the Divisional Court (DAY and LAWRANCE, JJ.) that the section was directed to the protection of persons from infection and not merely to the protection of the sick person himself, and the case was sent back to the justices to make the proper order. The learned judges here followed the cases of BOOKER *v.* TAYLOR[2] and REG. *v.* DAVEY.[3] In the latter case Mr. Justice DARLING said: "The legislature means to protect the public from infectious diseases. ..... If persons can obstruct and delay the operation of the order the whole purpose of the legislation may be defeated." Mr. Justice CHANNELL expressed the view that the justices were wrong in thinking that they could go behind the order.

It is thus clear that the certifying practitioner, who is usually the medical officer of health, has power to order the removal of rich and poor alike, if he thinks that course advisable in the interest of those living in the neighbourhood. In cases where extreme measures have to be adopted owing to the opposition of the patient's friends the medical officer of health will do well to take a second opinion as to the nature of the disease from which the patient is suffering. It is obvious that in legal proceedings which might be brought by a patient removed *vi et armis* from his home as the result of mistaken diagnosis the case for the defence would be materially strengthened by independent testimony. So long, however, as the medical officer of health acts in strict accordance with the provisions of the 124th Section of the Public Health Act, 1875, he will be protected from legal proceedings by Section 265 of that statute which provides (*inter alia*) that: "No matter or thing done ..... by any local authority or joint board or port sanitary authority, and no matter or thing done by any officer of such authority or other person whomsoever acting under the direction of such authority, shall, if the matter or thing were done ..... *bonâ fide* for the purpose of executing this Act, subject them, or any of them personally to any action, liability, claim, order, and whatsoever; and any expense incurred by any such authority, member, officer, or other person acting as last aforesaid, shall be borne and repaid out of the fund or rate applicable by such authority to the general purpose of this Act." Strict adherence to the very letter of the law is therefore essential. In the Scotch case of MITCHELL *v.* the MAYOR OF ABERDEEN[4] an action was brought against a medical officer who had directed the removal of a child suffering *from* an infectious disease without an order of justices, as required by Section 42 of the Public Health (Scotland) Act, 1867, which corresponds to Section 128 of the English Act. He was held liable in damages, the court declaring that he was not entitled to the protection afforded by Section 118 of the same Act, which is identical in terms with Section 265 of the Act of 1875 above quoted. It seems that the words used in the Public Health Act, 1875, are quite wide enough to protect any private practitioner who acts with the sanction, and in pursuance of the orders of, the local authority.

So much for the legal right of the local authority, acting by their medical officer, to direct the forcible removal of an infectious patient. Those who are doubtful about the expediency of having recourse to extreme measures may be to some extent relieved by a study of the "General Report upon the Use and Influence of Hospitals for Infectious Diseases," which was presented in 1882 to both Houses of Parliament, and which was re-issued in 1894. The late Sir RICHARD THORNE there made the following observations upon the working of the 124th Section of the Public Health Act, 1875:—

"One result of the inquiry has been to show how *seldom* such compulsory measures have been resorted to, the cases brought under my notice amounting in all to not more than some three dozen at the outside. In several instances, however, where persuasion has failed, either certain preliminary steps have been taken to procure a magistrate's order or the order itself has been obtained with a view of proving that the sanitary authority had the power in certain cases of resorting to compulsion; and in the majority of districts one such exhibition of power has sufficed to obviate any further resort to it."

Sir RICHARD THORNE also pointed out that when once an order had been obtained it was in nearly every instance

[1] June 9th, 1899; 15 Times Law Reports, 410.
[2] Times, Nov. 21st, 1882. [3] (1899) 15 Times Law Reports, 244.
[4] 20 Ct. of Sess. Cas. (4th ser.), p. 253.

quickly complied with, while some of those who most objected to removal to hospital have, on the termination of their illness, expressed their gratitude for the benefits that they had received in hospital.

Annotations.

"Ne quid nimis."

THE FAILURE OF INSULATION AND ITS PERILS.

IT is idle to dispute the advantages and convenience of electricity for lighting purposes and as a source of motive power when it can be shown that the actuating current can be kept well under control. Electricity, however, is evidently not an easy force to harness, judging from the extraordinary and alarming crop of accidents which have occurred quite recently in connexion with several electric railways. Accidents of this kind in closely fitting tubes suggest such awful possibilities that, naturally enough, public confidence in this mode of travelling has been considerably disturbed. Nor is the alarm thus created calculated to be allayed by the invariable explanation that the occurrence is due to "short-circuiting." It would be more satisfactory if the public could be assured that short-circuiting can be prevented. If it can be prevented, why is it not done? or is it a contingency against which it is not possible to provide with certainty? In that case cannot steps be taken to safeguard the travelling public against the serious effects of short-circuiting? Short-circuiting, it must be admitted, arises from a defect in the insulation which may or may not have originally existed, but in the great number of instances doubtless it is the result of, perhaps unforeseen, rapid wear and tear. Until, however, some better guarantee is forthcoming than has hitherto been the case that the most effective measures are taken to prevent short-circuiting or to obviate any serious consequences when it is established, travelling on an electric railway, and especially in the "tubes" in which there is practically only room for the train, means running a risk of a nature never heard of before in connexion with railways. The accidents arising from short-circuiting in Liverpool, New York, and on two of the London "tubes" are cases in point. We, of course, are aware that accidents are bound to arise in connexion with rapid travelling which cannot be reasonably anticipated. In the case of ordinary railways the snapping of a rod or coupling, or the bursting of a steam-pipe, belongs to this class. But in regard to electric railways it is demonstrated again and again that almost always the cause of accident is the failure of insulation. The explanation of the defect is simple, but explanation does not appear to afford a way out of the evil, and until such a way is found all sense of security vanishes. The same defect has led to outbreak of fire in the dwelling-house. It is appalling to think of the ease with which an insidious glow can be established in the casings and beneath the floor. The current taking a short route, the wires heat up and, as often as not, the woodwork or carpet bursts into flame. We have had personal experience of such occurrences, and it seems to us that greater control is required in regard to the way in which installations are fitted up in private houses. We cannot think that the electrical engineer will admit that he is baffled by such a defect, the exact nature and cause of which he perfectly well knows. We also think it desirable that the electric-supply companies should issue to their customers a few elementary hints on the handling and management of the current for domestic purposes. Very few people understand what a "cut out" or safety fuse is and still less its function. Much needless alarm would be spared the householder if he could be made to understand a little about these things. As it is, he looks upon electricity as a mysterious force which is easily provoked to do mischief. Should anything occur (however slightly abnormal it may be), perhaps a weird fizzing noise, or the "implosion" of a lamp, or the sudden, intense illumination of the filament through leakage somewhere, he is invaded with a species of terror and is powerless to act, being afraid that he is on the eve of a disaster nothing short of electrocution. His fears are intensified by the accounts which he remembers reading of horses being killed suddenly by walking upon the lid of an electric box in the street—and such instances are known and they are not entirely rare, being due once again to the failure of insulation. Once more we ask, Cannot the failure of insulation be prevented?

FOOD-SELLERS AND THE LAW.

THREE convictions obtained in the London police-courts during a single week illustrate the dangers which beset the humbler classes of the community and the extraordinary effrontery with which the adulteration of food is carried on in spite of the efforts made to check it. They will also to some extent, we hope, serve as a warning to those who endeavour to grow rich by imposing on their neighbours. In one a Suffolk farmer was fined £10, with £3 3*s*. costs, for depositing for sale at the Central Meat Market the carcass of a pig with regard to which Dr. W. Collingridge, medical officer of health of the City of London, was of opinion that it had died from acute tuberculosis. It may not have actually drawn its last breath without the intervention of the butcher, but the man who stated that he was employed to kill it and who certainly prepared it for sale and forwarded it to London gave evidence and admitted that the hearts, livers, and lungs of this animal and another were given to the dogs, although the carcases were considered good enough for the food of human beings in the metropolis. We are pleased to note that the expenses of the obliging butcher as a witness were disallowed by the magistrate. An inspector of the West Suffolk police informed the court that the defendant in this case was chairman of the local School Board and a guardian of the poor. In the second prosecution which we have noted Frank Ward, carrying on business at Sidmouth-street, Hackney, was convicted of selling as "butter" at 1*s*. a pound stuff composed to the extent of 94 per cent. of cotton-seed oil. Mr. Ward pleaded in extenuation that it was his first offence, or rather his first conviction, and if it proves to be his last the penalty of £10 with two guineas costs and the alternative of a month in gaol will not have been exacted in vain. The third case to which we call attention seems to show that a difficulty may arise in the minds of some magistrates where the legislature orders them to punish those who sell goods not of the nature, substance, and quality of those demanded by the purchaser, and leaves it to their good sense to determine what is or is not of that nature, substance, and quality, without laying down a definite standard or analysis for their guidance. A woman keeping a small grocer's shop in Southwark was summoned under the Food and Drugs Act for selling as golden syrup a compound which, indeed, contained 15 per cent. of cane sugar, but of which the residuary 85 per cent., was starch glucose. Mr. Paul Taylor at the first hearing of this case adjourned it, apparently in order to consider whether in the absence of any standard or legal definition of "golden syrup" he could convict, and finally he only imposed a nominal penalty of 5*s*. with 12*s*. 6*d*. costs. This leniency may have been prompted by pity for the ignorance of the retail trader, but if light punishment is to be the reward of the shopkeeper who professes ignorance he will have but little temptation to inquire

into the quality of the goods that he sells. Exemplary punishment, on the other hand, warns him and others that the retail trader should be, in relation to his customers, an expert who can and must protect them against deception. Beyond this we should hardly have thought that "golden syrup" needed definition. Those persons, not being entirely ignorant, who ask for "golden syrup" know that, roughly speaking, it is a by-product of sugar, and that sugar is derived from sugar-cane or beetroot by processes into which they do not inquire. The entirely ignorant expect to get "golden syrup" such as their parents gave them when they were young, or such as they have been in the habit of consuming, and neither the well-informed nor the ignorant ask for starch glucose at their grocers'. If they did ask for it by name—an exceedingly unlikely contingency—they would be entitled to have it, and if it was sold to them diluted with the product of the sugar-cane or the beet-root the vendor would be liable to prosecution under the Food and Drugs Act for selling that which was not of the nature, substance, and quality of the goods demanded. A standard definition of what ordinary beer should contain was not required in order to enable magistrates to convict under the Sale of Food and Drugs Act persons who sold beer containing appreciable quantities of arsenic, the presence of which, by the way, was accounted for by the use of glucose in brewing. It is, no doubt, possible to draw up definitions of the elements that all articles of diet should contain, in anticipation of the ingenuity that may be exercised by ingenious traders in diluting them, but it would not be easy to make such a list complete, and the case of the beer referred to, which was argued before the High Court on appeal, has shown that it is not necessary from a legal point of view. We observe that Mr. Paul Taylor is reported, in giving his decision, to have said that he supposed that there would be no objection to the sale of the compound described before him under the name of "treacle." Not being aware of the learned magistrate's reason for this remark, we can only say that in our opinion to sell starch glucose as treacle would be as objectionable as to sell it as golden syrup. The term "treacle" was originally, in accordance with its derivation, a medicinal term used for certain antidotes for the poisonous bites of wild beasts and snakes. Of its derivation and the meanings which it has borne in mediæval times those who ask for "treacle" in small grocers' shops are entirely ignorant. They are not in the position either of manufacturers who, we believe, distinguish by the terms "treacle," "golden syrup," and "molasses" fluid products obtained at different stages or by different processes when the sugar of commerce is being prepared. The persons who ask their grocers for treacle, golden syrup, or molasses all, in our opinion, mean the same thing, and they certainly do not mean or desire to have any such compound as that which has been described.

SMALL-POX IN LONDON.

THE Local Government Board has issued the following notice for the information of the public: "There is reason to believe that the spread of small-pox in London is very materially aided through the instrumentality of persons who, though not recognised as attacked by the disease, are nevertheless suffering from a modified form of it and are conveying its infection to others. The Local Government Board are advised that it is important that where persons, especially adults, develop what is supposed to be chicken-pox no time should be lost before authoritative medical opinion is obtained as to the nature of the malady, and that as respects anyone brought into relation with a case which is regarded as one of chicken-pox steps should at once be taken to obtain or renew that protection against small-pox which is afforded by vaccination. It is believed that many persons who have been recently revaccinated fail to submit themselves to medical inspection, as they should do, a few days after the operation, but assume from the appearance of the arm either that the operation had been successful or that they are insusceptible to small-pox. These assumptions, however, are not always correct, and it is highly important that all who are revaccinated, especially during the prevalence of small-pox, should be inspected by a qualified medical man." The returns for the week are slightly better as regards numbers. On Saturday, Jan. 18th, 22 fresh cases were notified and removed; on Sunday, the 19th, there were 25 fresh cases; on Monday, the 20th, there were 37 fresh cases; on Tuesday, the 21st, there were 26 fresh cases; and on Wednesday, the 22nd, there were 35 fresh cases. The City of Westminster has taken the very wise course of making chicken-pox a temporarily notifiable disease under Sections 55 and 56 of the Public Health (London) Act, 1891. The order of the Mayor, Aldermen, and Councillors comes into force to-day (Friday), the 24th. We think that this is a very sensible decision on the part of the City of Westminster and one calculated to lead to the diagnosis of many a case of small-pox which might very likely have passed unnoticed otherwise. We may add that Westminster makes the eighth borough in which chicken-pox must be notified, the others being Hampstead, St. Pancras, Hackney, Holborn, Bethnal Green, Greenwich, and Paddington. The Local Government Board has issued a circular to extra-metropolitan guardians calling to mind former circulars issued in February, 1893, and July, 1895. These circulars deal with small-pox in casual wards and workhouses. When such a case occurs measures should at once be taken to secure as far as practicable vaccination or revaccination of the other inmates.

DEATH FROM TAKING 60 GRAINS OF ACETANILIDE.

TOXIC symptoms have frequently followed the administration of acetanilide (antifebrin) even in medicinal doses, but cases of fatal poisoning must be very rare. One is described by Dr. Philip King Brown in the *American Journal of the Medical Sciences* for December. A man, aged 37 years, was given 60 grains of acetanilide in six powders for headache, and he took them all within a few hours. When seen by his medical attendant (after what interval of time is not stated) he was slightly delirious and complained of pain in the head and in the left umbilical region. There were pyrexia, rapid heart, marked constipation, slight jaundice, nausea, and vomiting. Calomel in small doses followed by salts produced a copious but bloody motion and the urine was dark red. On the following day he was admitted to hospital. The pulse was 78, soft and compressible; the temperature was 100·2° F.; the lips and nails were extremely cyanotic; and there was slight jaundice. He complained of pain in the left side of the abdomen and there was tenderness in the epigastrium and in the region of the left kidney. The skin was moist and the gums were bluish. The urine was strongly alkaline and deep red—nearly black. The colour was shown to be due to hæmatoporphyrin. There was a small sediment which contained granular casts. On boiling a large coagulum formed. On the day after admission only 150 cubic centimetres of urine were passed; after this there was complete suppression. There was great thirst which was quenched with milk, but soon everything that was given was rejected and rectal feeding had to be adopted. Though nothing was given by the mouth for days the vomiting continued. Cough and expectoration were persistent. There was slight delirium and the reaction of the pupils to light became more and more sluggish; in the end the pupils were widely dilated. The reflexes were first exaggerated, then they

gradually disappeared. The extremities were constantly cold. The temperature fell slowly to normal on the fourth day and was subsequently subnormal, reaching 95·5° in the rectum on the evening before death which took place on the eighth day of the illness. There was alternately constipation and diarrhœa, and 48 hours before death and 27 hours after the suppression of urine blood-colouring matter and broken-down blood cells were constantly in the fæces, which previously were blood-stained only occasionally. The heart began to fail on the fourth day. The skin became more and more jaundiced. On the fifth day after admission mucous casts were passed. Examination of the blood showed destruction of the red corpuscles which finally were reduced to 1,166,000 per cubic millimetre, while the leucocytes were 66,450 and the nucleated red cells 22,150. The alkalinity of the blood was diminished by 30 per cent. At the necropsy acute nephritis and intestinal catarrh were found, but nothing to account for the melæna.

THE CHEMISTRY OF NERVE DEGENERATION.

WE desire to call the attention of all neurologists, and of those specially interested in the treatment of insanity, to a paper by Dr. F. W. Mott and Dr. W. D. Halliburton published in the Philosophical Transactions, Series B, vol. cxciv., pp. 437-466. The title of the paper is "The Chemistry of Nerve Degeneration" and it well merits study, not only as a model of the way in which researches of this kind should be conducted, but also because the writers draw conclusions of considerable practical value in the diagnosis of nervous disorders. The keystone of the paper is the importance of excess of choline in the blood in cases of nerve degeneration, not only in diseases such as general paralysis, but in various diseases of the central and peripheral nervous system. The detection of choline, which is a product of the decomposition of lecithin, is effected by a chemical test, the obtaining of the yellow octahedral crystals from the blood, and also by a physiological test—viz., a temporary fall of pressure when injected intravenously in animals. The degenerated nerves in the animals were examined by the Marchi reaction which consists of a mixture of osmic acid and Müller's fluid by which the degenerated nerve-fibres are stained an intense black, whilst the healthy fibres are not stained. We do not propose to follow the writers in their various experiments. It is enough to say that the whole subject is clearly and scientifically worked out and that it forms a very valuable addition to our present knowledge of the chemistry of the blood in disease. There is good reason for saying that these valuable experiments were suggested by work previously done by Dr. Mott in the post-mortem rooms of the London County Asylums, and we take this opportunity of asking why the appointment of a special pathologist is confined to the asylums under the jurisdiction of the London County Asylums. We should like to see the experiment extended to the asylums under the control of the Metropolitan Asylums Board. At the imbecile asylums there is a profusion of material which is completely thrown away, and material of the most valuable kind, for among the weak-minded degenerates who form the bulk of the population of these district asylums are examples of disease set up in more elementary conditions than are met with in the county asylums, and in these undeveloped types there may be found clues to the unravelling of the more complicated structure of better developed brains, and lesions of a congenital kind which may better elucidate the true nature of physiological as well as pathological processes. So far the District Asylums Board has not made any move in this direction; it has carried out, more or less completely, its function of housing and maintaining a certain number of imbecile and demented people, and it may think that in doing this it has fulfilled its office. But we say very decidedly that its duty is not completed with this performance. It is surely part of the obligation of a great body to see that nothing should be lost of the material which it has at its disposal to further ends which may eventually be of the greatest advantage to the people generally and to the insane population in particular. The patients of these district asylums are very cheaply maintained, and certainly the medical element does not figure largely in the expenses. It may be sufficient for carrying on the care and treatment of the patients, but to do more than this is out of the question. the medical staff have not the time to devote to laborious scientific investigation, and the appointment of a pathologist who could work on the lines so successfully inaugurated by Dr. Mott would, we feel sure, be a welcome addition to the efforts that are now being made in London to place the teaching and the investigation of insanity on a proper basis. Is it not somewhat of an anomaly that the administration of lunacy in London should be under two distinct boards each independent of the other? The time seems to have arrived when the whole lunacy system should be fused into one body, more especially as there are in the district asylums many patients who are actually suffering from chronic insanity, as distinguished from mere imbecility, and who were at one time under the protection of the Lunacy Laws. For instance, what a convenience would result, to say nothing of an economy, from having the maintenance, the administration, the distribution, and the classification in the hands of one authority. The system would not be too large and it would be quite practical to work the strings from one centre. Moreover, convenience would ensue from the possibility of interdigitating one class of building with another in the matter of classification and treatment, what an opportunity for the correct compilation of results and statistics and for the creation of a harmonised system where at present there is confusion. The Asylums Board may be very well left with the management of the infectious hospitals, work to which it has risen in a most praiseworthy manner, but it can well afford to delegate its functions in a part of the lunacy question to the County Council, and we think that the latter would willingly embrace the opportunity for a consolidation of these scattered units. It is true that the district asylums were constituted in 1870 by a special Act introduced by Mr. Gathorne Hardy, and most probably some fresh legislation might be necessary before the care of the imbeciles could be transferred to another body by the one to which it was first committed, but in view of the great advantage which would result from what we are now recommending no difficulty need be apprehended on the legal score. The subject of the best form of accommodation for the treatment of patients connected with London is still occupying the earnest thought of the County Council, and the various proposals for the erection of "receiving houses," of a special building for the complete treatment of acute cases in London, and of other improvements are still *sub judice*. Before final arrangements are made it is to be hoped that the advisability of incorporating the existing separate units will be carefully considered.

THE TRAINING OF STATE CHILDREN.

How to provide for the training and maintenance of destitute children is a question which has occupied the minds of local authorities and of public-spirited philanthropists for more than one generation. It has given rise to a variety of schemes for its solution, which, nevertheless, if we are to judge from the practice of boards of guardians, remains to be found. The divergence of opinion which is thus indicated is most regrettable both from an economic and from a social standpoint. We seem to have as yet no

certain standard of the average cost per child which ought fairly to be required for this work, nor have we apparently any well-defined ideal of what the result of training should be. One thing is not desired: it is not intended to leave the child of poverty in the grasp of those habits of mind which tend to pauperism. On the contrary, it is generally understood among those who have gone most deeply into the subject that there can be no real progress unless the whole course of education is inspired by those principles of self-reliance and social responsibility which govern the robust life of self-respecting communities. There is abundant proof to show that it is in vain to think of developing any such inspiration in children maintained together by the score and hundred, as they are in many great parochial charities. It is quite exceptional to find in the institution-bred child that healthy individuality which is characteristic of children who have been boarded out in the freer and more natural atmosphere of family life. Between these two extremes of social existence there are not a few intermediate systems, the cost of which and their influence upon character have been tested by a lengthy experience. We believe we are right in saying that success, whether economic or educational, varies in direct and fairly accurate ratio with the degree to which the practice of segregation has been carried. There are training ships, certified cottage-homes, facilities for boarding out and for emigration, all available for the orphaned or forsaken children of this country and, as a rule, they are found to justify the expectations founded on them. On the other hand, we find parishes like Woolwich, Greenwich, and Stepney expending large sums on the creation of so-called village communities, the very title of which is expressive of pauper aggregation with all its mischievous associations. It is inconceivable that two methods so contrary should produce similar results. And experience has proved that they do not.

ASPHYXIA FROM PRESSURE ON THE CHEST.

IN the *Boston Medical and Surgical Journal* of Jan. 2nd Dr. H. L. Burrell and Dr. L. Crandon have described a remarkable case of "Traumatic Apnœa or Asphyxia"—stoppage of respiration by pressure on the chest. This condition is well known as a cause of death, but it has been principally studied post mortem, because usually it is fatal in a few moments. Hence the value of a case of recovery such as the following. A man, aged 22 years, was caught between an electric car and a doorpost and his chest was compressed antero-posteriorly as in a vice for three minutes, then, when the car was moved, he fell unconscious. An hour later, when admitted to hospital, he was still unconscious. The pulse was 100 and weak but regular; the respirations were 30 and shallow. The hands and nose were cold. Blood flowed from the ears and the nostrils. The pupils were small and equal and did not react to light; there was great chemosis. The knee-jerks were absent and the other reflexes were diminished. There was a fracture of one or more of the left lower ribs but subcutaneous emphysema of the left chest anteriorly was an obstacle to examination. The most striking feature was a dusky, bluish, mottled appearance of the skin of the head, face, neck, and chest as low as the third rib. At first the patient was thought to be cyanosed, but the colour was not universal, did not disappear on pressure, and persisted after he improved. Uniformly distributed all over the dusky skin were minute areas (from 0·5 to 1 millimetre in diameter) of normal tint surrounded by ill-defined bluish borders which united into a meshwork. This condition extended over the lips to the mucous membrane of the mouth. There were considerable subconjunctival and minute retinal hæmorrhages. The urine contained albumin and blood. Nitroglycerine, $\frac{1}{25}$th of a grain; atropine, $\frac{1}{75}$th of a grain; and strychnine, $\frac{1}{15}$th of a grain were given subcutaneously. After four hours consciousness returned. On the fourth day the patient was comfortable but the livid colour was unchanged. On the ninth day the colour began to fade but it did not go through the modifications of an ecchymosis; on the twelfth day it had all but disappeared. The patient was discharged practically well in the fourth week. There are several historical examples of this accident—the rush of the mob at the Champs de Mars in 1837, when 23 persons were crushed to death; the panic at the Pont de la Concorde in 1866, when a mob crushed nine of its members to death; the fire at the Vienna Ring Theatre in 1881 with nearly 1000 fatalities; the panic at the Victoria Hall, Sunderland, when nearly 200 children were asphyxiated by being crushed in a corridor; and the charity bazaar fire in Paris in 1897. Dr. Ollivier, who examined the bodies of the victims of the Champs de Mars catastrophe, says that without exception the face and neck were of a uniform violet tint and spotted with ecchymoses. In nine persons there were subconjunctival extravasations, in four sero-sanguineous froth ran from the mouth and nose, in four blood flowed from the nose, and in three from the ears; and in seven there was fracture of ribs. In females the sternum was fractured. The large veins were filled with blood and the vessels of the pia mater were engorged. There were effusions of blood into the posterior part of the lungs. In the Pont de la Concorde cases Tardieu found punctate hæmorrhages in the loose tissue of the pericranium, under the visceral pleura, and on the surfaces of the heart and abdominal viscera. The peculiar colour of the skin described above is explained by Dr. Ollivier as due to stasis of carbonised blood in dilated and paralysed capillaries. The indications for treatment are manifest. If the patient is seen immediately after the accident artificial respiration should be performed; later, stimulants should be used, as in the case related.

THE CONTROL OF SMALL-POX IN AND AROUND THE METROPOLIS.

IN our issue of Jan. 18th (p. 175) we discussed the question as to what the new metropolitan borough councils and other authorities of London were doing with regard to controlling the spread of small-pox. We also mentioned that it was possible that some members of Parliament might be asking what the London County Council was doing with regard to small-pox; and we suggested that the enemies of the Council might hold that body lukewarm in regard to the prevention of small-pox. At the meeting of the County Council which was held on Jan. 21st Mr. G. J. Cooper, the chairman of the Public Health Committee, took THE LANCET very seriously to task, and is reported as saying that no better answer could be made to the article to which we have referred than the report which the Public Health Committee had presented. That report now lies before us and we can assure Mr. Cooper that its contents afford a complete answer to the hypothetical question which we put in our issue of last week. From this report we learn that common lodging-houses, in which a case of small-pox has occurred, have been constantly visited by the officers of the Council and that some slight pecuniary assistance has been given, owing to which the inmate of a common lodging-house, if ill, has been found to be willing to keep himself isolated in a particular room until he can be certified to be suffering from some malady which warrants his removal to an infectious diseases hospital. There is, of course, no power of compulsory vaccination, but the Public Health Committee believes that objections may be sometimes overcome by the offer of a small pecuniary consideration. The medical officer of the County Council has made an arrangement with each of the borough medical officers by which the latter supply him daily with all particulars which they have been able to ascertain with regard to each case

of small-pox occurring in their respective districts. Copies of this information are at once sent to all the medical officers of health in the county of London, so that every medical officer is put in early possession of all available information as to cases occurring in other boroughs, which may affect his district. The London Government Bill of 1899 has thrown some difficulties in the way of health administration in the metropolis. For instance, the hospitals to which cases of infectious disease are removed are dissociated entirely from the disease-preventing authorities; but, considering the multiplicity of authorities dealing with public health matters throughout the county of London, we think that the said authorities are doing their best to ascertain and to identify cases of small-pox and to limit the spread of this very infectious complaint.

THE MUNICIPAL INSPECTION OF LONDON RESTAURANTS.

A RESOLUTION was adopted by the London County Council at its meeting on Tuesday last, that the Public Health Committee of the Council should be asked to consider and to report as to the best means of exercising periodical inspections of the kitchens of public restaurants. The resolution called attention to the fact that in London there are many thousands of persons whose business compels them to have the greater part of their food in public restaurants and undoubtedly it is of material importance that such food should be prepared in wholesome and sanitary surroundings. The Public Health Committee, in devising machinery for carrying out effective methods of investigation, will keep before it the plans adopted in the official inspections of bakehouses and factories, and it is our belief that it will find in many eating-houses of the metropolis a state of things justifying the action of the Council many hundred times over.

CRIME IN GENERAL PARALYSIS.

IN the *Journal of Mental Science* for January Dr. W. C. Sullivan, deputy medical officer of H.M. Prison, Pentonville, has published an article on the medico-legally important subject of crime in general paralysis. While crime has been extensively investigated in recent years in association with conditions of arrested or distorted cerebral and physical development (criminal anthropology), less attention has been given to a class of criminals in whom the morbid aptitude for criminal acts is connected with acquired cerebral degeneration or defect, such as might be caused by alcoholic intemperance or general paralysis. The examination of conduct in chronic alcoholism shows a remarkable frequency of suicidal and homicidal impulse as well as a tendency to sexual crimes, a subject to which attention has already been called in these columns.[1] In general paralysis, on the other hand, says Dr. Sullivan, the character of conduct was entirely different. A rough illustration of this might be given in statistical form. During nine years (1888 to 1896) among convicted prisoners certified as insane in the local prisons of England and Wales there were 274 cases (261 males and 13 females) in which the form of mental disease was considered to be general paralysis. Amongst these 261 male general paralytics homicide or homicidal attempts constituted the crime in nine cases, suicidal attempts were met with in eight cases, sexual offences in 13 cases, assaults in 21 cases, crimes of acquisitiveness in 144 cases, threats in eight cases, and other offences in 58 cases. Crimes of acquisitiveness were notoriously common in general paralysis, their most typical form being petty larceny, fraud, forgery, and embezzlement. Generally the circumstances and execution of the offence showed a characteristic silliness, though occasionally the general paralytic did commit robbery or fraud with an appearance of adequate motive and premeditation. The most important point to be noted was that this tendency existed in the exalted and optimistic variety of general paralysis and not in the depressed or melancholic form. Very often the impulses to theft or undue acquisitiveness preceded the grandiose delusions by a long period of time or were met with in the purely demented type of general paralysis without delusions. Besides this impulsive origin, paralytics who had lost money or blundered in their accounts might in a more lucid phase embezzle to make good the deficit—a point of practical importance in relation to the question of legal responsibility. Paralytics are also very amenable through their *suavité* to criminal suggestion by others. Magnan quotes the case of a patient who was sent by his wife to steal in the Bon Marché, and Foville mentions two instances where paralytics were used as tools to utter forgeries. Acts of violence may be committed by paralytics when their grandiose tendencies are opposed, but the majority of grave acts of violence depend on a primary homicidal impulse generated by the more or less persistent state of emotional depression. Sexual offences in early paralysis—in the form of rape, defilement of children, and offences against public decency—are not uncommonly met with.

[1] THE LANCET, April 14th, 1900: On Alcoholism and Suicide.

A CASE OF DENTAL DISEASE OF OBSCURE ORIGIN.

A CASE of disease of dental origin terminating fatally is recorded by Mr. E. W. Roughton in the last issue of the Transactions of the Odontological Society. The patient, a man, aged 36 years, complained of a swelling in the region of the left angle of the mandible. When seen by Mr. Roughton about two months after the onset of the trouble there was a large inflammatory swelling involving the region of the angle of the mandible and extending upwards on to the cheek, forwards to the submaxillary region, and backwards over the sterno-mastoid muscle. The gum in the region of the molars was swollen and the skin over the swelling was red and œdematous. Deep-seated suppuration was suspected, but there was marked absence of pain, tenderness, and fever. An incision into the swelling evacuated a little serum but no pus. Fomentations were then applied in the hope that the swelling would suppurate freely and then clear up. The reverse, however, occurred, for the swelling slowly but steadily increased in size and declined to suppurate. An exploratory incision was next made and two or three small pieces of necrosed bone were removed. A large quantity of soft, friable granulation tissue was found but there was no collection of pus. Subsequently a sequestrum about an inch square was removed and the mandible fractured spontaneously. The swelling gradually extended down the neck and displaced the trachea and larynx. The swelling in the neck was then freely incised, but still no collection of pus was discovered; some small pieces of dead bone were, however, removed. A bacteriological examination of the tissue was made and an almost pure culture of streptococcus pyogenes was obtained. There was no actinomyces. The condition of the patient became worse, the wounds in the neck assumed a phagedænic character and the skin between them sloughed, and death took place owing to the ulceration laying open the carotid artery. The post-mortem examination showed that the mandible on the left side was destroyed as far forward as the lateral incisor; the internal organs were healthy and there was no evidence of pyæmia. The case is of interest from many points of view. 1. The absence of pain from first to last. 2. The slight degree of fever. During the 10 weeks the patient was in hospital only twice did the

temperature record 100° F. 3. The extensive formation of a friable granulation tissue exuding a thin serous discharge and the almost entire absence of suppuration. 4. The local character of the disease.

SANITARY IMPROVEMENTS AT WINDSOR CASTLE.

CONSIDERABLE improvements, amounting to reconstruction, have been made in the sanitary arrangements of the southern part of Windsor Castle, recently occupied for a few days by their Majesties, by the officials of His Majesty's Office of Works under the advice and supervision of Professor W. H. Corfield, their consulting sanitary adviser. The whole of the drains under the south towers, from Edward the Third's Tower to the Victoria Tower inclusive, have been done away with, so that there is now no drain under the buildings on that side of the castle, and new watertight iron drains have been laid outside the buildings. Internal water-closets and soil-pipes have been cleared away, ventilated lobbies formed in connexion with the water-closets, new soil-pipes fixed outside the building, and the best improved appliances of all kinds fixed. Suitable disconnexion arrangements have been provided between the new drains of these towers and the castle sewers, so that each of the towers is, in fact, so far as the drainage is concerned, a house in itself. Similar improvements, we are informed, will gradually be carried out throughout the rest of the castle.

THE DIFFERENTIAL DIAGNOSIS OF SIMPLE ABDOMINAL CONTUSION AND OF CONTUSION WITH INTESTINAL INJURY.

THE *Boston Medical and Surgical Journal* of Dec. 5th, 1901, contains a valuable paper on this subject by Dr. John T. Bottomley. He points out the difficulty of obtaining reliable statistics and pleads for a careful study of cases of abdominal contusion in the first few hours so as to assist in the solution of the all-important question of the time at which an operation should be performed. He has himself adopted the method of comparing all the available cases (20) of undoubted severe intestinal injury from contusion admitted to the Boston City Hospital (undoubted because proven by necropsy, operation, or death from acute peritonitis) with an equal number of cases of undoubted simple contusion (undoubted because the symptoms disappeared in a few days). The latter were *chosen* cases only in that an attempt was made to obtain cases of simple contusion as nearly as possible identical with those of intestinal injury. The following were the causes in both classes: striking by a wagon shaft, falls from various heights, kicks (human and equine), being run over, being fallen on or struck by objects, and squeezing. Thus causes apparently identical may produce a trivial or severe injury. But severe well-localised violence is usually an important factor in intestinal injury. Injuries caused by flying objects such as pieces of board from circular saws are liable to be serious. Injuries which are quite similar may cause profound shock in one patient and none in another; the pain may be intense in one and slight in another. Pain was present in all the cases of intestinal injury and in all but one of those of simple contusion. It may be the only symptom of a most severe injury—e.g., complete rupture of the ileum. Vomiting occurred on admission in 10 cases of each class; it was absent in two cases of intestinal injury and in seven of simple contusion, but in about half the cases (of either class) in which it was absent on admission it appeared within 2 hours. Its appearance late in, or after, the first 24 hours is usually of serious import. As to shock, muscular spasm, distension, tenderness, external signs of violence (contusion, abrasion, or traumatic hernia), dulness, alterations of temperature and pulse, analyses of the two series of cases show that none of these symptoms can be relied upon in diagnosis. Of the 20 cases of intestinal injury operation was performed in 11, and in only one with success; the nine cases treated expectantly were all fatal. In the successful case operation was performed in less than four hours after admission; four cases were operated on five or six hours after admission, one 12 hours, four 24 hours, and one 48 hours. In the cases not operated on the average duration of life after the injury was 2·33 days, the extremes being seven days and one day. In the cases of simple contusion the symptoms disappeared on an average in 4·4 days; in two cases exploratory incisions were made; nothing was found, and uneventful recovery ensued. Dr. Bottomley concludes that no sign or combination of signs indicates the nature of the injury and that the only means of making a diagnosis sufficiently early for treatment is by laparotomy. To wait for symptoms of peritonitis is, he says, to wait too long. Improvement in the first few hours may be deceptive; it may be only reaction from shock and should, he thinks, furnish the opportunity for operation. Many operations would be no doubt performed in cases in which there is no intestinal injury, but they are attended with little danger. Nimier[1] states that of 307 cases of abdominal contusion treated expectantly 92 were fatal, and Schmitt says that the expectant treatment of cases of abdominal contusion sufficiently severe to suggest perforation gave a mortality of 97·5 per cent.[2] On the other hand, Petry found that the mortality of 42 similar cases treated by laparotomy was 66·7 per cent. Kirstein had a mortality of 55·5 per cent. in 18 cases; in four laparotomy was done within five hours of injury and all were successful. His statistics show that every hour that passes after the injury lessens the chance of recovery after operation. Dr. Bottomley's careful analysis is disappointing in that he arrives at the purely negative conclusion that early diagnosis of the nature of the injury is impossible; but even if his view as to laparotomy be not accepted his ingenious and original method of attacking a very difficult problem is admirable and he has clearly established a most important fact—i.e., the close similarity of the early symptoms of simple abdominal contusion and of contusion with rupture of the intestine, which should be a warning to the practitioner to regard every case with anxiety.

HYDROCYANIC ACID GAS IN PUBLIC HEALTH WORK.

UNDER this title Dr. John S. Fulton and Dr. William R. Stokes of Baltimore describe in the December number of the *Maryland Medical Journal* a variety of experiments on the destruction of bacterial, insect, and animal life by means of hydrocyanic acid gas. The chemicals employed were cyanide of potassium, concentrated sulphuric acid, and water, in the relative proportions of 1, 1·5, and 2·25. The amount of gas to be used was expressed in terms of cyanide—so many grammes of cyanide per 100 cubic feet of enclosed space. The following composed the apparatus in which the gas was generated. Three jars, placed at suitable relative elevations, were connected by syphon tubes. The requisite amount of cyanide was placed in the lowest and largest jar. The intermediate jar contained the water, and the upper jar the concentrated acid. The lower of the two syphons was automatic, and actuated by a definite height of liquid in the intermediate jar. It did not therefore operate until the last few ounces of acid were being delivered from the upper jar into the intermediate one. By this means the operator had time to leave the room and to close it behind him, and there was no danger of effervescence causing the chemicals to escape from their containers. The amount of

[1] Archives de Médecine et de Pharmacie Militaires, March, 1898.
[2] Münchener Medicinische Wochenschrift, July 19th, 1898.

gas used was equivalent to 33 grammes of cyanide to 100 cubic feet of space. Shelves were fixed across the window of the room, and on them the cages containing animals and insects were placed for easy examination. House flies exposed in the ordinary wire traps were killed in from two to four minutes after effervescence began in the cyanide jar. Bed-bugs were placed in tubes plugged with two inches of cotton, and these were put inside a Florence flask plugged with five inches of cotton. The bugs were therefore under seven inches of cotton. The room was closed in this experiment for 25 minutes, when all were removed at once to the open air and examined. Out of 60 or 70 insects two very young ones were alive. In a Florence flask with the mouth wrapped thickly with cotton mosquitoes (culex pungens) were killed in four minutes. Small black ants in test-tubes plugged with one inch of cotton were killed in five minutes. Rats in cages fell in convulsions in from two minutes to three and a half minutes from the beginning of the evolution of gas and ceased to move in from 30 to 40 seconds after falling. Mice and guinea-pigs succumbed more easily than did rats. Dr. Fulton and Dr. Stokes conclude that in hydrocyanic acid gas an exceedingly rapid and powerful agent is available for the destruction of all animal and insect pests within all fairly tight enclosures, and they point out that by its prompt action on mosquitoes, rats, and flies it is likely to be useful in the prophylaxis of yellow fever, malaria, filariasis, plague, and enteric fever. The gas is, of course, extremely dangerous to man, but they say that it is by no means unmanageable. After each of the experiments the room was entered instantly for the purpose of removing insects and animals, no other precaution being used than the suspension of respiration while in the room.

AN OPERATION FOR THE REMOVAL OF PROMINENT ALVEOLAR PROCESS OF THE MAXILLA.

AN undue prominence of the anterior portion of the maxilla, even when edentulous, is often a source of much trouble to the dental surgeon who is anxious to insert a satisfactory and artistic denture. In the January issue of the *International Dental Journal* Dr. W. Howard records a case where the difficulty was overcome by removing a portion of the prominent bone. An incision was made from the region of the canine on one side to that on the other, the line taken being along the summit of the alveolar process. The muco-periosteum was raised and the bone was exposed for some distance both on the labial and the palatal aspects. The alveolus was then removed with bone-clippers to a depth of from one quarter to half an inch from the canine to the canine. The rough edges of the bone were smoothed and the muco-periosteum was then replaced and trimmed, a sufficient amount being allowed for shrinkage. The edges of the wound were united with catgut sutures. The result was in all respects satisfactory from an æsthetic point of view.

IMMUNITY FROM SMALL-POX.

WE have received a letter from a correspondent pointing out that although the statistics recently published in relation to the present outbreak of small-pox afford useful information regarding the number of vaccinated and unvaccinated persons attacked by the disease, yet no mention is made of cases occurring in persons who have not only been previously vaccinated but have also had small-pox. One attack of the disease protects for a considerable period against a second attack, and should the patient again suffer from small-pox after an interval of some years the attack usually runs a mild course. Similarly, vaccination of a person who has had small-pox is rarely successful, but we are far from suggesting that such is always the case. We do not know of any recorded case of small-pox attacking a person who not only has previously had the disease but has also been subsequently successfully vaccinated. Many small-pox patients state that they have had a previous attack, but if careful inquiry is made into the symptoms, distribution of eruption, and duration of illness, and if the scars, if such be present, are examined, the alleged first attack usually proves to have been chicken-pox. Dr. J. MacCombie, writing in Professor T. Clifford Allbutt's "System of Medicine," states that in three-fourths of the cases of so-called second attack that have come under his notice he was able to satisfy himself that the first attack had been one of chicken-pox, and in most of the others there was not sufficient evidence to show whether the first attack had been small-pox or not.

NURSING OF THE SICK POOR IN WORKHOUSES.

THE President of the Local Government Board has appointed from among the officers of the department a committee (consisting of Mr. Grant Lawson, M.P., Parliamentary secretary, Mr. W. E. Knollys, C.B., chief general inspector and one of the assistant secretaries, and Dr. A. H. Downes and Mr. A. Fuller, Poor-law medical inspectors, with Mr. R. H. A. G. Duff as secretary) to consider this subject. The committee will inquire and report as to the qualifications of nurses and probationers, the difficulties in obtaining an adequate supply of these officers, and the regulations necessary to define the respective duties of the master or matron and of the superintendent nurse.

THE DISTRIBUTION OF PLAGUE.

A TELEGRAM from the Governor of the Cape of Good Hope, received at the Colonial Office on Jan. 15th, states that for the week ending Jan. 11th the cases of plague in the Cape Peninsula numbered 0. At Port Elizabeth there was one case, that of a coloured person. At Mossel Bay the cases numbered 2, both Europeans. In all the other places the cases numbered 0. The deaths from plague throughout the whole colony numbered 0. The area of infection remained unchanged; and the cases of plague in persons under naval and military control numbered 0. As regards Mauritius, a telegram from the Governor received at the Colonial Office on Jan. 17th states that for the week ending Jan. 16th the cases of plague numbered 27 of which 21 were fatal.

THE INVESTIGATION OF CANCER.

SUNDRY paragraphs having appeared lately in the daily press concerning the investigation of the cause and treatment of cancer we think it well to state that we have authority to say that a draft scheme has been drawn up by an eminent surgeon which has been submitted to and received the approval of various leading members of the medical profession. It is proposed to raise a sum of money sufficient when invested for the income to defray the expenses of the investigation, and at a meeting held on Oct. 23rd, 1901, at which the Presidents of the Royal College of Physicians of London and of the Royal College of Surgeons of England, as well as nearly all the members of the special finance committee in connexion with the laboratories of those colleges respectively, were present, it was unanimously resolved:—

> That we cordially approve of a proposal which has been made to raise a sum of money, the interest of which shall be devoted to the investigation of the causes, prevention, and treatment of cancer. We are of the opinion that under the control of a suitably elected advisory committee an effective scheme could be drawn up, and that a convenient and suitable place for the investigations would be the laboratories belonging to the Royal Colleges.

We understand that considerable interest has been shown in and towards this movement by several highly placed and

wealthy personages and there is good reason for thinking that success will attend it if some effort is now made. In view of what has already been done in Germany, the United States, and in Italy it is quite time that this country should bestir itself in the matter. As soon as the scheme has been made public we shall return to the consideration of the question.

THE FOURTEENTH INTERNATIONAL CONGRESS OF MEDICINE.

DR. F. W. PAVY, F.R.S., has been elected to the office of President of the National Committee for Great Britain and Ireland of the International Congress of Medicine, in place of the late Sir William Mac Cormac, Bart., K.C.B., who so worthily filled the office for many years.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE courses of lectures to be delivered at the Royal College of Surgeons of England during 1902 are as follows: On Monday, Wednesday, and Friday, Feb. 10th, 12th, and 14th, Mr. C. P. White, Erasmus Wilson Lecturer, will give lectures on the General Pathology of Tumours; on Feb. 17th, 19th, and 21st Dr. T. G. Brodie, Arris and Gale Lecturer, will lecture on the Pulmonary Circulation, more particularly in relationship to Variations in Cardiac Activity; on Feb. 24th, 26th, and 28th Professor W. McAdam Eccles will lecture on the Anatomy, Physiology, and Pathology of the Imperfectly Descended Testis. The first lecture will deal with the anatomy, the second with the physiology and a portion of the pathology, and the third with the rest of the pathology. Each lecture will be illustrated by lantern slides. On March 3rd, 5th, and 7th Professor F. G. Parsons will lecture on the Blood-vessels of Mammals in relation to those of Man; and on March 10th, 12th, 14th, 17th, 19th, and 21st Professor C. Stewart, F.R.S., will lecture on Organs of Respiration. All the lectures will commence at 5 P.M.

THE first place on Wednesday, Feb. 26th, has been obtained by ballot for the second reading of a Bill "to secure the better training of midwives and to regulate their practice."

THE annual dinner of the West London Medico-Chirurgical Society will take place on Wednesday, Feb. 19th, at 7.30 P.M., at Frascati's, Oxford-street, W.

THE KING has approved of the appointment of Dr. Wroughton Gerald Heath, medical officer of Montserrat, to the Legislative Council of that Presidency.

Pharmacological Notes.

OINTMENTS AND OINTMENT BASES.

IT is satisfactory to find that the ointments of the 1898 edition of the British Pharmacopœia have earned the commendation of those who are responsible for the preparation of the forthcoming United States Pharmacopœia. According to C. S. N. Hallberg, Ph.G.,[1] these ointments, in the opinion of the United States Pharmacopœia Committee of Revision, are a vast advance over those of any and all other pharmacopœias, excepting the German and Austrian (1900) revised editions, which have not yet been studied. In a preliminary report by the sub-committee on ointments it is shown that in previous United States pharmacopœias the various bases for ointments have been chosen solely for pharmaceutical reasons and without any discrimination as to the general therapeutical purposes of this form of medication. Considered from the therapeutical standard the ointments may be divided into three groups, as follows:—

1. Protective: Non-absorbent or epidermatic.
2. Emollient: Nutritive, absorbent, or endermatic.
3. Constitutional, systemic: Absorptive or diadermatic.

These generalisations, though empirical, afford a basis for the study of these preparations in the light of the present state of medical science. The researches of Unna, Liebreich, and Shoemaker have demonstrated the necessity of taking the character of the fat into consideration, in order that the desired effect of an ointment may be obtained. Shoemaker, in "Ointments and Oleates," says: "That the oleaginous basis possesses valuable physiological and therapeutical properties peculiar to itself is proven by the fact that the sebaceous secretion of the skin is of an oleaginous composition and consistence. In estimating the value of an ointment we must take into consideration the separate virtues of the fatty basis and the included drug or drugs. ..... Sebum consists of fat cells, free fat and epithelial débris, and has the following chemical composition: olein and palmitin, 40 per cent.; casein, 13 per cent.; gelatin, 8 per cent.; water, 35 per cent.; and small quantities of sodium chloride, phosphate, and sulphate. It is unmistakeably a natural or physiologic unguent." The sebum is related to the nutrition of the hair, maintains the skin in a soft and flexible condition, fortifies it against changes in temperature by regulating the heat, acts as a lubricant, thus obviating deleterious friction, and is protective against irritant discharges. It acts as a preservative to the cuticle, protecting it from maceration by excessive perspiration and consequent exposure of the sensitive cutis vera. The varied uses of ointments are indicated by this enumeration of the properties and functions of the sebum; and the foregoing classification is useful in discussing the choice of ointment bases.

Non-absorbent bases.—When a purely external contact is desired the paraffins in their three different forms—viz., liquid, soft, and hard paraffins—afford the best bases. Such ointments may be required as (1) protectives; (2) antiseptics; (3) astringents; (4) counter-irritants; (5) germicides; and (6) parasiticides. These paraffins should be bland and neutral; sometimes they produce irritating and stimulating effects instead of being purely protective, lubricating, or emollient; these ill-effects are ascribed to sulphur and other impurities. These bases are used for the following drugs in the 1898 British Pharmacopœia: the nitrate, red and yellow oxides, and red iodide of mercury, ammoniated mercury, zinc oleate, creosote, eucalyptus oil, boric, salicylic, and carbolic acids, glyceria of lead subacetate, iodoform, and the carbonate and iodide of lead.

Emollient—absorbent bases.—Lard, sometimes with an addition of wax and oil, and, in the case of alkaloids, of oleic acid, afford vehicles with a range of melting points well adapted to the varying pharmaceutical and therapeutical requirements of this class of ointments. Probably fresh, pure lard is the ideal basis for endermatic medication, but the commercial article, often an emulsion-like mixture of lard, tallow, cotton-seed oil, borax, and water, is unfit for use. Carefully prepared lard, benzoinated and preserved in a cool place, resists decomposition for a long time and answers admirably for the extemporaneous preparation of many ointments, but it is easily affected by many chemical reagents—e.g., the oxides of mercury. Lard in becoming rancid decomposes into fatty acids which produce irritation where an emollient effect is desired. Lard and bland animal and vegetable oils penetrate into, but not through, the integuments. Theobroma (cacao) oil affords one of the most elegant vehicles of this class, having an agreeable odour and not being prone to rancidity. As a nutrient cod-liver oil is the most effective when applied by inunction. These fats are intended for the following therapeutical purposes: emollient (also protective), anodyne, alterative, local irritant, resolvent, sedative, and stimulant. The drugs of this class officially used in the British Pharmacopœia include galls, opium, mercury, oleate, red iodide, subchloride and nitrate of mercury, sulphur, potassium iodide, chrysarobin, zinc oxide, belladonna, cantharidis, iodine, sulphur iodide, the alkaloids aconitine, atropine, cocaine, and veratrine, resin, stavesacre, capsicum, and liquid tar. The rosewater, compound mercury, and spermaceti ointments are also of this class.

[1] Pharmaceutical Journal, vol. lxvi., pp. 30 and 39.

Absorptive bases.—In this class of ointments the basis must not only penetrate but pass through the skin. Purified and hydrated wool-fat possesses this property in a high degree because, it is supposed, of its power to absorb more than its weight of water, and also because it is not a true fat but a cholesterin analogous to the sebaceous secretion. It has other advantages, being practically unalterable, never becoming rancid, and, when pure, not being affected by medicinal agents. Experiments reported by Unna, Shoemaker, Kiernan, and others have demonstrated its great absorptive power, ointments of narcotic extracts with this basis being effective in twice the dose given by the mouth; quinine, potassium iodide, and mercury produced their constitutional effects and were found in the urine shortly after inunction with ointments containing these agents with wool-fat. It is said to be especially useful in application to the orifices of the body in genito-urinary practice, and for other purposes. It is often mixed with oil, wax, and especially theobroma oil, and Helbing uses the following mixture, the addition of paraffin and wax reducing its absorptive power equal to that of lard: hydrous wool-fat, 65 parts; paraffin, 30 parts; ceresin, 5 parts. Such mixtures are largely used as substitutes for lard or oils, owing to their freedom from rancidity and their resistance to chemical agents, while possessing the same rate of absorption as the animal and vegetable fats and oils. The experiments of Shoemaker go to prove that the oleates do not pass through the skin, but exercise an intra-cutaneous effect; they cannot, therefore, be used for producing systemic effects; undiluted wool-fat should be used when systemic effects are desired. The 1898 British Pharmacopœia directs hydrous wool-fat to be used in the preparation of hamamelis and hemlock ointments.

A DECADE OF PUBLIC HEALTH WORK IN THE ADMINISTRATIVE COUNTY OF LONDON.

II.[1]

READERS of Mr. Shirley Murphy's previous reports will be prepared to find that a large portion of the volume before us is occupied with a discussion of the behaviour of preventable disease in London during the year 1900. The zymotic—or, as the Royal College of Physicians of London prefers to call them, the epidemic—group of diseases first comes under consideration. And here we are pleased to notice what is, if we mistake not, an entirely new departure in these reports. We refer to a series of diagrams showing the seasonal distribution in London of each of the common infectious diseases in the successive weeks of a long series of years. By means of a curve the mean mortality in each week is shown as a percentage above or below the mean for the year, and by the help of these diagrams it is possible to forecast with some approach to accuracy what will be the probable course of a given disease at any desired period of the year. For example, to take the case of small-pox, the diagram for this disease is based upon the mortality experience of 60 years (1841–1900). The curve exhibits two maxima, the first corresponding with the end of January and the beginning of February and the second corresponding with the fourth week of May. The curve reaches the mean line, which is represented by 14 weekly deaths, in the first week of July; it then further steadily falls until the end of September, when it touches the lowest point, and thereafter as steadily rises until it again reaches the mean line in the third week of December. According to the experience of the last 60 years, then, we see that in London small-pox attains its greatest prevalence during the first half and its least prevalence throughout the second half of the year. In this respect it contrasts strongly with scarlet fever, diphtheria, and enteric fever, all of which diseases, if their rate of mortality is to be trusted, show diminished prevalence during the earlier months and increased prevalence during the later months of the year.

These instructive diagrams are a development of a like series prepared 10 years ago by Dr. W. Ogle of the General Register Office. Mr. Shirley Murphy has, however, brought them up to date and consequently has greatly increased their value for statistical purposes. We recognise the appropriateness of their appearance in the reports of the county medical officer of health rather than in those of a Government department. It is much to be desired that, if possible, Mr. Shirley Murphy will insert in his future reports similar curves showing reported *attacks* (instead of deaths) for each of the common infectious diseases that are notifiable under the London Act of 1889. There is no question that a set of diagrams so constructed and based on the experience of the metropolis for a period of ten years would be simply invaluable for administrative sanitary purposes.

In view of the existing serious prevalence of small-pox amongst us Mr. Shirley Murphy's remarks concerning the earlier cases of this disease that appeared in London during 1900 will be of special interest at the present time. It appears that in the course of the year 86 persons in all were *certified* to be suffering from small-pox, but in 13 of these cases subsequent examination showed that there had been errors in diagnosis. London had been free from small-pox during the last six months of 1899, and although in the course of 1900 several cases were imported from abroad, the disease never became established within the county until after its close.

"It is well deserving of note," Mr. Shirley Murphy says, "that much of the small-pox in London in 1900 had its origin in infection received abroad. The first case of the group of 18 cases, occurring mostly in Hackney, was that of a boy living in proximity to the Eastern Hospital, the date of whose attack appears to coincide in point of time with those of patients in the Eastern Hospital who had been infected by a man in that hospital who was admitted on Dec. 7th, and was removed, suffering from small-pox, on Dec. 9th, 1899. This man had returned from Jerusalem suffering from small-pox. If this explanation of the boy's illness be correct some 25 cases of small-pox had their origin in this source." Other instances are given in the report which show that infection had been imported several times from Paris and other foreign parts in the course of the year, but that in every case the measures adopted by the local sanitary authorities were successful in limiting the spread of the disease. Speaking of the changing age incidence of small-pox mortality in London in successive periods since 1841, Mr. Shirley Murphy points out that whereas in the period 1842–1850 the deaths of children under five years of age constituted nearly 70 per cent. of the total deaths, the proportion steadily fell in subsequent decennia until it reached a minimum of 25 per cent. in the 10 years 1881–90. The reduction in successive periods was undoubtedly due to more complete vaccination of the infant population, and the increase in the mortality at early ages which has been observed since 1890 corresponds almost exactly with the growing neglect of infant vaccination which is shown in a table to have taken place in recent years. It is an ominous fact to which public attention cannot be too forcibly directed that in the year 1898 (the latest for which returns are available) about one-third of the infant population of London below the age of one year were unvaccinated.

The incidence of scarlet fever in 1900 was below the normal, and so likewise was the virulence of the attacks as measured by their case mortality. For this reason the medical officers of health of the various districts have had less occasion than in other recent years to comment on special outbreaks of that disease. We note, however, that in the year under present review, as in previous years, school attendance exerted a marked influence on the spread of scarlet fever amongst children of school age. The summer holidays of the London board schools in 1900 began on July 26th—i.e., in the latter part of the thirtieth week of the year—and the schools re-opened on August 27th—i.e., at the beginning of the thirty-fifth week. From a table given in the report we find that during the holiday period—namely, the interval between the thirty-second and thirty-fifth week—the incidence of scarlet fever upon children of from three to 13 years of age was *below* the average by nearly 16 per cent., whereas in the four weeks following the holidays the incidence rose to 69 per cent. *above* the average. It is therefore impossible to avoid the conclusion that school attendance was largely responsible for this difference in the spread of scarlet fever, more especially since the statistics of previous years have pointed to a similar conclusion. Exactly the same lesson is derivable from the statistics of diphtheria. In the year 1900, as in

[1] No. I. was published in THE LANCET of Jan. 11th, 1902, p. 112.

previous years, the spread of this disease also seems almost to have been determined, at any rate at school ages, by aggregation of the children at school.

From the table respecting diphtheria we find that whilst in the holiday period the attacks amongst children of the ages of from three to 13 years were *below* the average by 32 per cent., they were 45 per cent. *above* the average in the four weeks succeeding the holiday period. Diphtheria seems to have shown less prevalence in London as a whole during 1900 than the average of the previous four years. The disease showed the greatest proportional prevalence in the districts of St. Saviour Southwark, Fulham, Stoke Newington, Plumstead, Lee, and Camberwell; and the least in St. Martin-in-the Fields, Paddington, and St. George's Hanover-square. The mortality from diphtheria in London as a whole in 1900 was considerably below the average; it was equal to 0·34 per 1000 of the population, against an average rate of 0·49 per 1000 in the 10-year period 1890–99. Enteric fever was notified during the year under review in 4317 cases, giving a ratio of 1·0 attack in each 1000 of the London population, as compared with an average ratio of 0·8 per 1000 in the previous 10 years. The death-rate from this disease in the county generally was equal to 0·16 per 1000, a rate which, although slightly lower than that of the immediately preceding year, was nevertheless, with that exception, higher than the rate in any year since 1893. In the distribution of enteric fever mortality in 1900 the northern and eastern groups were above, and the western and central groups were below, the average rate for London. In discussing the causes of enteric fever in London the reports of several of the local health officers give accounts of the communication of infection from one person to another. Dr. Reginald Dudfield observed this in four instances; Dr. L. C. Parkes speaks of the extension of the disease from one member of a family to seven others; Dr. J. F. J. Sykes gives account of two households in St. Pancras in one of which the first case was followed by six others and in the second by nine others; Dr. G. Newman connects nine cases in Clerkenwell with one or other of three cases occurring among children attending the same school; Dr. L. T. F. Bryett gives particulars of six series of such cases occurring in Shoreditch; Mr. C. R. Kempster attributes a group of cases occurring in Battersea to the same cause; and Dr. W. A. Bond mentions the case of two nurses who were infected while in attendance upon cases of this disease. The above instances are confirmatory of the evidence which has been accumulating for many years past in the experience of hospital physicians and others and which affirms the communicable nature of enteric fever *under certain conditions*. We know of a physician of long experience in the hospital isolation of cases of enteric fever who distinctly asserts the infective character of this disease; he further states that his own painful experience of this fact in the persons of several members of his staff has caused him to avoid the employment of young and presumably susceptible nurses in the treatment of enteric fever and to restrict the nursing of that disease either to those who have been rendered immune by a previous attack or to the older members of the staff.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council was held on Jan. 16th, Mr. H. G. HOWSE, the President, being in the chair.

The SECRETARY reported that he had not received any essay on the Diagnosis and Treatment of Bullet Wounds of the Chest and Abdomen, the subject of the Jacksonian Prize for the past year. It was resolved that the amount of the dividends accruing from the Jacksonian Fund for the past year should be added to the principal of the fund.

The PRESIDENT stated that he would deliver the Hunterian Oration in 1903.

A letter was read from Mr. Herbert W. Page expressing the wish to resign his seat on the Court of Examiners at the end of the pass examination for the Membership to be held this month. The PRESIDENT stated that the vacancy thus occasioned would be filled up at the ordinary meeting of the Council in March, and that the vacancies which would be occasioned by the expiration of the periods of office of Mr. W. J. Walsham and Sir William H. Bennett would also be filled up at that meeting, Mr. Walsham not being a candidate for re-election.

Mr. T. Bryant was re-elected as representative of the College on the Council of the Queen Victoria Jubilee Institute for Nurses for three years.

A letter was read from Lady Mac Cormac thanking the Council for the sympathy expressed to her on the death of her husband.

A letter was read from the Secretary of the Medical Board of St. Luke's General Hospital, Ottawa, communicating a resolution adopted by the members of the medical staff of the hospital expressing regret at the death of Sir William Mac Cormac, and recording their appreciation of his efforts in the cause of science and the advancement of the best interests of the medical profession.

A letter was read from the President and General Secretary of the Fourteenth International Medical Congress to be held in Madrid from April 23rd to 30th, 1903, inviting the College to send a delegate to the Congress. Mr. Edmund Owen was appointed the delegate.

A letter was read from Mr. Bryant reporting the proceedings of the General Medical Council at their late session. The thanks of the Council were given to Mr. Bryant for his services as the representative of the College on the General Medical Council.

On the motion of Mr. EDMUND OWEN it was resolved that the names of the Honorary Fellows should be continuously printed in the College Calendar and that in case of death the date thereof should be appended.

The March meeting of the Council will be held on Thursday, March 20th.

ASYLUM REPORTS.

Devon County Asylum (*Annual Report for 1900*).—The average number of patients resident during the year was 1166, comprising 486 males and 680 females. The number of cases admitted during the year was 249, and of these 222—viz., 100 males and 122 females—were first admissions. The admissions exceeded those of the previous year by 32. Mr. Arthur N. Davis, the medical superintendent, states in his report that the number of admissions during the year was, with one exception, the largest in any one year since the opening of the asylum. The number of cases discharged as recovered during the year amounted to 112—viz., 44 males and 68 females, or 9·6 per cent. of the average number resident. The deaths during the year amounted to 85—viz., 47 males and 38 females, or 7·29 per cent. as calculated on the same basis. The mean average age at death for both sexes was 58 years. No inquest was held during the year. The casualties during the year amounted to eight and were principally the result of falls among aged patients, but in no case was death consequent upon the injury. Of the deaths two were due to nephritis, three to colitis, four to cerebral hemorrhage, four to cardiac disease, seven to epilepsy, nine to senile decay, 10 to phthisis and general tuberculosis, 11 to pneumonia, 20 to general paralysis of the insane, and the rest to other causes. There has been no illness of an epidemic character, but there were two cases of enteric fever and several cases of erysipelas and influenza. "On the whole the general health of the patients has been good, notwithstanding the continued accumulation of old and feeble cases." Among the principal causes of insanity in the admissions hereditary influences were found in 26 cases, previous attacks in 25, alcoholic intemperance in 15, and senile mental decay in 17. Employment in the garden and on the farm for the male patients has been freely provided and with great benefit. "In the workshops only a limited number find employment on the male side, but a very large proportion of the women are usefully engaged in the needle-room, laundry, and wards." The Commissioners in Lunacy state in their report that the general appearance of the day-rooms, wards, and dormitories has been much improved and speaks well for the management. Some degree of overcrowding still exists on the male side. The condition of the patients in respect to personal tidiness was satisfactory, and the medical records and post-mortem notes were well and carefully kept. The committee of visitors to the asylum state in their report that the weekly charge of maintenance per patient has been raised from 8*s.* 9*d.* to 9*s.* 3*d.* The committee have recommended that the sum of £500 should be

granted by the county council for connecting the remainder of the drains of the asylum with the public sewer, and that a piece of ground which has a long frontage opposite the asylum grounds should be purchased for £500.

Royal Asylum of Montrose (Annual Report for 1900).—The average number of patients resident during the year was 661 and comprised 300 males and 361 females. During the year 190 patients were admitted, and of these 79 were males and 111 were females. The number of first admissions was 154—viz., 65 males and 89 females. Dr. John G. Havelock, the medical superintendent, states in his report that in 50 of the cases admitted there was an acknowledged hereditary predisposition to insanity, in 31 there was a history of alcoholic intemperance, in 15 cases domestic troubles and business worries were assigned as the cause, in 15 old age appeared to be the determining factor, while in 42 no cause could be ascertained. The number of patients discharged as recovered during the year was 67, or 10·1 per cent. of the average number resident. The deaths during the year amounted to 57, or 8·6 per cent. as calculated on the same basis. Post-mortem examination was made in all cases where the consent of the relatives could be obtained. Of the deaths five were due to pneumonia, six to epilepsy, seven to general paralysis, seven to senile decay, 10 to cardiac disease, 11 to phthisis and other forms of tuberculosis, and the rest to other causes. Suicidal tendencies were marked in a large proportion of the patients admitted, and the inquiries of Sir John Sibbald now published for the first time show that Forfarshire and the neighbouring county of Kincardine have a larger proportion of suicides compared with the population than the rest of Scotland. The same authority states that "the counties of the east coast of Scotland all show higher suicidal rates than the western counties. It is curious that the city of Dundee shows a lower rate than the rest of Forfarshire. It is so far in favour of the view of those who say that Celticism and Catholicism prevent suicide, for Dundee contains the largest proportion of Irish Catholics of any part of Forfarshire." Certain parishes in the two counties named send a very high proportion of suicidal patients to the asylum and suicides are specially frequent in these parishes. "A possible explanation of this," says Dr. Havelock, "seems to be that of inherited predisposition, for the suicidal tendency is strongly hereditary in most cases and is prone to increase unduly in districts where the population is stagnant and stationary. The whole subject is beset with problems of extreme interest and difficulty." New villas are now completed and accommodate 60 male patients of the quiet and convalescent class. The cost with furnishings has amounted to less than £115 per bed. There is a notable increase of private patients paying the higher rates of board who are accommodated in Carnegie House. Additions and alterations in the form of electric lighting have been made throughout the building. The recent decision of the managers to join the Scottish asylums laboratory scheme is regarded as an important step in the right direction. The report of the house committee shows a profit in the farm and garden department of £416, but it records with regret a considerable deficit in the financial statement for the year. "This has been in great measure due to the same causes as last year, while the recent increase in patients' board has not yet come into full operation. Provisions have again risen in price and coal has increased in cost." The Commissioner in Lunacy states in his report that Carnegie House was found in admirable order, the surroundings of the patients being replete with every comfort. The patients in the asylum proper bore every evidence of being well cared for and their dress and personal appearance were satisfactory. The wards were clean and in good order and the medical registers were found to be kept with care and accuracy.

Hereford County and City Asylum (Annual Report for 1900).—The average number of patients resident during the year was 377 and comprised 177 males and 200 females. The admissions during the year amounted to 87—viz., 46 males and 41 females. Of these 64 were first admissions. Mr. C. S. Morrison, the medical superintendent, states in his report that "the influx of incurable senile cases is the most prominent and depressing feature of this asylum." The work of the staff is crippled by so excessive a proportion of helpless chronic and senile patients who present no prospect of recovery. The evil is to be remedied by having separate blocks for acute and curable cases, while the majority of the chronic helpless and incurable patients should be housed more cheaply in buildings erected at less cost. Nine males out of the 46 among the admissions were insane from the results of alcoholism. With respect to this Mr. Morrison observes that "these cases touch the fringe of a very large ethical State question of the necessity of promoting temperance by better education. We are to suppose that the flood of prosperity which has secured a higher wage to the labourer has been in excess of what his education and social environment have allowed him to expend in a more profitable way. ..... The increase of alcoholic insanity with a higher wage is not incidental to this country alone, but observable generally. ..... The natural enemy of all excesses should be the schoolmaster." The number of patients discharged as recovered during the year amounted to 31—viz., 15 males and 16 females, or 8·2 per cent. of the average number resident. The deaths during the year amounted to 32, comprising males and females in equal proportion, or 8·49 per cent. as calculated on the same basis. Of the deaths one was due to meningitis and cerebral hemorrhage, one to tuberculosis of the intestines, two each were due to epilepsy and general paralysis, two to asphyxia by choking, three to Bright's disease, 10 to senile decay, and the rest to other causes. Post-mortem examinations were made in 25 cases. Three inquests were held during the year, two on epileptics who had died from accidental suffocation, and one on a case of death following self-inflicted injuries previously to admission. For the first time in many years the asylum has been free from any influenza in a virulent epidemic form. This exemption is attributed chiefly to the "mildness of the winter, which never necessitated the over-heating of the air in the basement to maintain the necessary temperature. By over-heating we seem to lose some of the available moisture in the atmosphere necessary to maintain the healthy tone of the respiratory passages. ..... How far the evil necessity of such over-heating has conduced within recent years to increase in this asylum pulmonary phthisis is a matter needing further investigation." A number of patients had been boarded out for nearly 10 years, the cost of which has already reached £14,000, and it is now proposed that these patients should be brought back, as the boarding-out contracts are about to lapse. The asylum is to be enlarged to the extent of providing accommodation for 150 additional patients, and this, it is estimated, will cost about £30,300, representing in round figures £200 per bed. Electric illumination is installed throughout the new buildings and in the old blocks it will replace gas. The effluent from the sewage farm has been rendered innocuous and less offensive by the adoption of combined bacteria- and filter-beds and for the present they seem to be efficient. The Commissioners in Lunacy state in their report that the wards were bright, that the dormitories and bedding were in excellent condition, and that the appearance of the patients was neat and satisfactory. The medical case-books were very well kept.

Public Health and Poor Law.

LOCAL GOVERNMENT BOARD.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

On Recent Prevalence of Diphtheria in the Prestwich Urban District, by Dr. THEODORE THOMSON.[1]—Prestwich, an outlying suburb of Manchester, with a population (including the Prestwich Asylum) of about 12,000, suffered in 1900 from a severe and sustained epidemic of diphtheria. Dr. Thomson visited the district in consequence of the request of the Prestwich Urban District Council for local inquiry into the causes of this epidemic, and he revisited the locality in 1901 in view of the continued prevalence of the disease and with reference to sundry questions of sanitary administration. The epidemic of diphtheria in 1900 fell with great severity upon one portion of Prestwich, the village of Rooden Lane. In this village, with a population of some 3200, as many as 70 cases of diphtheria were notified, while the rest of the district contributed only six cases; and in 1901 Rooden Lane had 52 notified diphtheria cases, as against 12 which

[1] London: Eyre and Spottiswoode, East Harding-street; Edinburgh: Oliver and Boyd; Dublin: E. Ponsonby. Price 2d.

occurred in the rest of the district. Dr. Thomson was able to dismiss the possibility of milk having served in this instance as an agent in the dissemination of diphtheria. With regard to the question whether various unwholesome conditions which were met with in Rooden Lane (e.g., privy-midden nuisances, unpaved yards, and house-drains connected directly to sewers) played a part in promoting the recent prevalence of diphtheria his report speaks with suitable caution "in our present uncertainty as to the conditions particularly favourable to the life and growth of the diphtheria bacillus." It would be greatly to the advantage of the public health if careful research could be undertaken which would make it possible to express a more certain opinion on this matter and so to determine how far diphtheria is capable of repression by preventive measures specially directed against insanitary surroundings of dwellings. There appears to be no doubt that at Rooden Lane the spread of diphtheria was aided, and perhaps largely aided, by the transmission of infection from the unrecognised sick to the healthy while at school together. Closure of schools had a distinctly beneficial influence. Moreover, the fact that scarcely any diphtheria occurred in the village of Prestwich, only half a mile from Rooden, has to be associated with the circumstance that each of these villages has its own public elementary schools, and that there is but little attendance of children from the one village at the schools of the other. While pointing out defects in administrative action in certain directions Dr. Thomson shows that, on the whole, the measures to combat diphtheria adopted by the district council and its officers were thorough. Antitoxin inoculation was used on a considerable scale as a preventive measure, but the degree of success obtained is not indicated in the report. Mr. F. Stephenson, the medical officer of health, made a practice of examining the throats of the children attending school, with satisfactory result. Dr. Thomson's observations as regards the general sanitary circumstances of Prestwich district are less favourable to its local sanitary administration, and he points to a number of conditions which it is to be hoped that the district council will take steps to remedy. Though the privy-midden has been often condemned we cannot refrain from quoting Dr. Thomson on the subject:—

> No worse conservancy system for populous localities has yet been invented than the privy-midden, capacious, deep, usually permitting soakage of its liquid contents into the surrounding soil and, above all, foul-smelling. Its occasional cleansings lead to further fouling of the ground on which, by way of preliminary to removal, its contents are thrown. Only noses inured to stinks can tolerate such a system, and no such noses should be found among those whose duty it is to act as guardians of the public health.

On the Sanitary Circumstances and Administration of the Gildersome Urban District, and upon Recent Prevalence of Enteric Fever therein, by Dr. W. W. E. FLETCHER.[2]—This report records some interesting facts with regard to a small outbreak of enteric fever attributable to contamination of a particular milk-supply. Gildersome for several months antecedent to March, 1901, had been suffering somewhat excessively from "sporadic" enteric fever, occurring in different parts of the district and not attributable, so far as could be ascertained, to any single common cause of infection. But from March 7th to April 15th 25 cases of enteric fever were notified from 18 houses. Of these households 16 were supplied by a particular milk-seller. Dr. Fletcher ascertained that two members of the family of this milk-seller had been attacked during February by illness which it seems certain in the light of subsequent events was enteric fever, and on March 9th another member of this family had an undoubted attack of the disease. The milk-seller in question was a man in a small way of business, and the householders who suffered from fever formed a large proportion of his customers. The way in which the milk may have become infected at the milk-seller's does not appear to be indicated in the report; no doubt because no trustworthy facts could be ascertained. The facts given by Dr. Fletcher with regard to the sanitary condition and administration of Gildersome indicate that this small district belongs to a type which may be expected to become common in certain counties—a locality which has only in recent times become urban in character, but which is already losing its population by reason of the exhaustion of its local coal-mines. Such districts present particular difficulties as regards sanitary improvements. Amendment is needed in many directions, but the district, with a population of the working class which is now no more than 3000, has already borrowed some £12,000 and is obliged to spend a further large sum to complete its sewerage scheme. Unless some new industries succeed in Gildersome it is probable that as years go on the population which remains will be less able to afford the rates required to repay the debt of the district, and correspondingly unwilling to incur any expense in matters of public health.

On the Sanitary Circumstances of the Llandilofawr Rural District, Carmarthenshire, and on Sanitary Administration by the Rural District Council, by Dr. S. W. WHEATON.[3]—This report also deals with a colliery district. Population has been steadily falling off in almost all the parishes of the large district of Llandilofawr in Carmarthenshire, with the exception of the subdistrict of Llandebie, in the Amman Valley, where mining and manufactures are in progress. In the greater part of the district are villages comprising many empty and dilapidated dwellings, while in Llandebie and its neighbourhood large collections of dwellings of an urban character are springing up. These new houses leave much to be desired; for example, their roofs are frequently without eave-spouting and they have been constructed without damp-proof courses. It is evident that much stricter supervision of building operations is required. The great trouble throughout the district, strange as it may seem when its hilly character and high rainfall are considered, is lack of water. In Llandebie the inhabitants have to depend on three private wells, two of which are liable to serious contamination; in Penygroes the villagers have to go 400 yards away to a mere dipping-place, which is apt to fail them in the summer, when they resort, as is common in this part of the country, to water coming from abandoned coal-workings. Dr. Wheaton gives many striking instances of villages with unsatisfactory supplies and habitual scarcity of water. The difficulties of obtaining a good public supply no doubt may be great in some of the villages in question, but it is evident that a great improvement could be effected in the majority of places (Llandebie, for example) with very little difficulty. Where there is abundance of water in watercourses and streams no care seems to be taken to prevent pollution. Privies are frequently built over streams and refuse of all kinds is thrown into them. The district council appears to have paid little attention to the advice of their medical officer of health in these or in other matters, and they have insisted upon the reappointment of an inspector of nuisances who appears to be past his work. The prospects of "sanitary progress" in Llandilofawr hardly seem bright, but it may be hoped that some improvement will follow the publication of Dr. Wheaton's report.

[2] Ibid., price 6*d*.

[3] Ibid., price 3*d*.

VITAL STATISTICS.

THE DEATH-RATE OF 1901.

As all medical officers of health are now required to complete their annual reports to the Local Government Board by the middle of February in each year the following figures have been provisionally compiled for their convenience from the quarterly reports of the Registrar-General.

England and Wales, 1901: Annual Birth- and Death-rates, and Rates from the Seven Chief Epidemic Diseases.

	Annual rates per 1000 living.			Infant mortality.
	Births.	Deaths (all causes).	Deaths from seven chief epidemic diseases.	Annual death-rate of infants under one year per 1000 births.
England and Wales	28·5	16·0	2·05	151
Rural England and Wales ...	27·2	15·7	1·55	138
33 Great towns	30·0	18·6	2·68	165
67 Smaller towns	29·9	17·1	2·24	163

HEALTH OF ENGLISH TOWNS.

IN 75 of the largest English towns 8629 births and 5035 deaths were registered during the week ending Jan. 18th.

The annual rate of mortality in these towns, which had been 20·1 and 18·3 per 1000 in the two preceding weeks, further declined last week to 17·7 per 1000. In London the death-rate was 18·0 per 1000, while it averaged 17·6 in the 74 other large towns. The lowest death-rates in these towns were 4·8 in Hornsey, 8·0 in Derby, 9·2 in Smethwick, 10·3 in Kings Norton, 10·7 in Birkenhead, and 10·8 in Walthamstow; the highest rates were 24·0 in Wolverhampton and in West Hartlepool, 24·1 in Bolton, 24·2 in Stockton-on-Tees, 27·9 in St. Helen's, and 31·8 in Merthyr Tydfil. The 5035 deaths in these towns included 534 which were referred to the principal zymotic diseases, against 510 and 482 in the two preceding weeks; of these 534 deaths 158 resulted from measles, 90 from whooping-cough, 85 from diphtheria, 59 from small-pox, 57 from scarlet fever, 50 from diarrhœa, and 35 from "fever" (principally enteric). No death from any of these diseases was registered in Hastings, Southampton, Ipswich, Burton-on-Trent, West Bromwich, Derby, Wallasey, Wigan, Warrington, Rochdale, or West Hartlepool; the highest zymotic death-rates were recorded in Great Yarmouth, Handsworth, Aston Manor, Oldham, Rotherham, Stockton-on-Tees, and Merthyr Tydfil. The greatest proportional mortality from measles occurred in Great Yarmouth, Aston Manor, Stockport, Oldham, Preston, Rotherham, Stockton-on-Tees, South Shields, and Merthyr Tydfil; from scarlet fever in Aston Manor, Handsworth, St. Helens, and Bolton; from diphtheria in Hanley; and from whooping-cough in Stockton-on-Tees. The mortality from "fever" showed no marked excess in any of the large towns. 55 deaths from small-pox were registered in London, three in Tottenham, and one in Hornsey, but not one in any other of the 75 large towns. The number of small-pox patients in the Metropolitan Asylums hospitals, which had been 666, 754, and 873 at the end of the three preceding weeks, had further risen to 877 on Saturday, Jan. 18th; 213 new cases were admitted during the week, against 226, 261, and 306 in the three preceding weeks. The number of scarlet fever cases in these hospitals and in the London Fever Hospital at the end of the week was 2760, against 3137, 2987, and 2864 on the three preceding Saturdays; 288 new cases were admitted during the week, against 263, 313, and 250 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 452 and 366 in the two preceding weeks, further declined last week to 307, and were 296 below the corrected average. The causes of 65, or 1·3 per cent., of the deaths in the 75 towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Bristol, Salford, Bradford, Leeds, and 37 other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Aston Manor, Liverpool, St. Helens, and Middlesbrough.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 23·2 and 19·6 per 1000 in the two preceding weeks, rose again last week to 20·8 per 1000 and was 3·1 per 1000 above the mean rate during the same period in the 75 large English towns. The rates in the eight Scotch towns ranged from 14·1 in Leith and 17·1 in Edinburgh to 23·1 in Paisley and 23·5 in Glasgow. The 673 deaths in these towns included 23 which resulted from measles, 13 from diarrhœa, 11 from whooping-cough, six from scarlet fever, six from diphtheria, and four from "fever." In all 63 deaths were referred to these principal zymotic diseases last week, against 86, 70, and 56 in the three preceding weeks. These 63 deaths were equal to an annual rate of 2·0 per 1000, which was slightly above the mean rate last week from the same diseases in the 75 large English towns. The fatal cases of measles, which had been 36, 30, and 23 in the three preceding weeks, were again 23 last week, and included 20 in Glasgow and two in Dundee. The deaths from diarrhœa, which had been 12 and 19 in the two preceding weeks, declined again last week to 13, of which six occurred in Glasgow, four in Dundee, and three in Edinburgh. The fatal cases of whooping-cough, which had been 12 and five in the two preceding weeks, rose again to 11 last week, and included nine in Glasgow. The deaths from scarlet fever, which had been seven, four, and two in the three preceding weeks, increased again last week to six, of which three were registered in Greenock. The fatal cases of diphtheria, which had been eight, five, and four in the three preceding weeks, rose again to six last week, and included two in Edinburgh and two in Dundee. The deaths from "fever," which had been seven and three in the two preceding weeks, increased last week to four, of which two occurred in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 182 and 142 in the two preceding weeks, rose again last week to 176, and showed an excess of 37 over the number in the corresponding period of last year. The causes of 18, or nearly 3 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 29·4 and 25·0 per 1000 in the two preceding weeks, further declined to 23·4 per 1000 during the week ending Jan. 18th. During the past four weeks the death-rate has averaged 26·2 per 1000, the rates during the same period being 19·5 in London and 20·5 in Edinburgh. The 170 deaths of persons belonging to Dublin registered during the week under notice showed a decline of 12 from the number in the preceding week, and included six which were referred to the principal zymotic diseases, against nine and 10 in the two preceding weeks; of these two resulted from diarrhœa, one from measles, one from diphtheria, and one from "fever." These six deaths were equal to an annual rate of 0·7 per 1000, the zymotic death-rates during the same period being 2·2 in London and 1·0 in Edinburgh. The mortality from diarrhœa slightly exceeded that recorded in the preceding week; while that from diphtheria and from "fever" showed a decline. The 170 deaths in Dublin last week included 39 of children under one year of age and 52 of persons aged 60 years and upwards; the deaths of infants showed a marked increase over the number in the preceding week, while those of elderly persons slightly declined. One death from violence and two inquest cases were registered; and 58, or more than a third, of the deaths occurred in public institutions. The causes of 10, or nearly 6 per cent., of the deaths in Dublin last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

Fleet Surgeon Robert William Williams has been placed on the Retired List, with permission to assume the rank of Deputy Inspector-General of Hospitals and Fleets. Dated Jan. 10th, 1902.

ARMY MEDICAL STAFF.

Surgeon-General Thomas Francis O'Dwyer is placed on retired pay. Dated Dec. 26th, 1901.

ROYAL ARMY MEDICAL CORPS.

Lieutenant-Colonel A. O. Geoghegan is appointed to the charge of the Station Hospital at Shahjehanpur. Colonel J. F. Supple, Principal Medical Officer, Bombay and Nagpur Districts, proceeds to Poona to officiate as Principal Medical Officer, Bombay command. Lieutenant-Colonel W. O. Wolseley, in medical charge of the Station Hospital, Belgaum, has proceeded to Bombay to officiate as Principal Medical Officer, Bombay and Nagpur Districts.

IMPERIAL YEOMANRY.

Essex: J. J. Macgregor to be Surgeon-Lieutenant.

INDIA AND THE INDIAN MEDICAL SERVICES.

The King has approved of the retirement from the service of the undermentioned officers:—*Bengal Establishment:* Lieutenant-Colonel Edward Bovill, dated Nov. 8th, 1901. Captain Albert Edwin Hayward Pinch, half-pay list, dated Dec. 17th, 1901. *Madras Establishment:* Lieutenant-Colonel Mervanji Pestanji Kharegat, dated August 8th, 1901.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain E. W. Barnes to be Surgeon-Major. Surgeon-Captain William Baron Cockill, 2nd Volunteer Battalion the Border Regiment, to be Surgeon-Captain.

VOLUNTEER CORPS.

Rifle: 2nd Cadet Battalion the King's Liverpool Regiment: Henry James Bailey to be Surgeon-Lieutenant. 2nd

Volunteer Battalion the Gordon Highlanders: Surgeon-Major W. S. Cheyne to be Surgeon-Lieutenant-Colonel.

VOLUNTEER MEDICAL STAFF CORPS.

The Glasgow Companies: Surgeon-Lieutenant D. J. MacKintosh, to be Lieutenant on appointment as Transport Officer. Robert Ramsey to be Surgeon-Lieutenant.

SOUTH AFRICAN WAR NOTES.

The following have been discharged from hospital to duty: Lieutenant H. F. Hart, R.A.M.C., Lieutenant W. H. Odlum, R.A.M.C., Lieutenant Edward Bennett, R.A.M.C., and Civil Surgeons Kernhoeu and Eustace.

RECENT DESPATCHES AND THE CONCENTRATION CAMPS.

The extension and development of the blockhouse system, some desultory fighting, with the capture of a few laagers, and the usual sick returns, mainly make up the news from South Africa. It has been a matter of surprise to many people in this country that the Government did not, in the matter of the concentration camps and the alleged ill-treatment of the Boer women and children, seize an earlier opportunity of taking the public into its confidence by intimating the effect of Lord Kitchener's despatches, instead of waiting for the opening of Parliament for their publication *in extenso*. Such a course would no doubt have materially curtailed, if it did not altogether put an end to, the agitation and exaggeration which have been going on of late in this country and abroad. It almost looks as if the Government had cleverly withheld the information in its possession in order to seize upon the most fitting time for publishing it with the best effect, for it is scarcely likely that people would have allowed themselves to be deluded, as they have been, had they known all the facts and how flimsy and insincere was the foundation on which the agitation rested. It was very natural, of course, that public feeling should be greatly touched by the deplorable accounts of the amount of sickness and mortality occurring among the Boer families located in these camps. The publication of Lord Kitchener's despatches describing all that had taken place between him and General Louis Botha and others has, however, thrown quite a new and strong light upon the situation. Mr. Chamberlain had no difficulty in his recent speech in the House of Commons in proving that Lord Kitchener had no option in the matter, but had perforce to adopt the course thrust upon him by the Boer generals in order to prevent the occurrence of still worse evils than those which actually befell the encamped Boer population. The statement of facts regarding the origin and history of these concentration camps set forth in the despatches from South Africa, and so effectively epitomised by the Colonial Minister in his speech, not only afforded a clear account of the nature and causes of the diseases which prevailed, but showed that no effort that humanity could suggest had been spared in trying to deal with the matter. It would probably have proved more merciful in the end, by shortening the course of the war, if the British authorities had altogether refused to undertake the task of rescuing the families forsaken by the Boers and had left them, as any other nation would have done, to their fate. Actuated by motives of humanity those in authority in South Africa could not face the responsibility of adopting such a pitiless course. It is, therefore, illogical and unjust to talk of our "barbarous methods" in connexion with these camps.

MENTIONED IN DESPATCHES.

In despatches from Lord Kitchener published in the *London Gazette* of Jan. 17th the following names are mentioned: Lieutenant J. M. Sloan, R.A.M.C., for distinguished good service in Colonel Benson's action at Braakenlaagte on Oct. 30th, 1901; Captain G. D. Laing, Medical Officer 5th Imperial Yeomanry, for good service under heavy fire in Colonel Von Donop's action at Kleinfontein on Oct. 29th, 1901; Lieutenant T. E. Fielding, R.A.M.C., for good service at Itala on Sept. 26th, 1901.

Serjeant-Major P. H. Green, R.A.M.C., and Lance-Corporal W. J. Wilson, R.A.M.C., for good work under fire. Lance-Corporal Wilson has been promoted corporal by the Commander-in-Chief.

THE HEALTH OF THE NAVY.

The statistical report of the health of the navy for the year 1900 has just been issued in the form of a blue-book. It is stated that the returns for the total force serving afloat in the year 1900, after making allowance for exceptional conditions on the Cape of Good Hope and West Coast of Africa and China Stations, may be regarded as satisfactory. The aggregate number of cases of disease and injury recorded for that year furnishes a ratio of 882·29 per 1000, which compared with the ratio for 1899 shows an increase of only 2·66 per 1000 and a decrease of 11·22 per 1000 when compared with the average of the last three years. We hope to deal more fully with the report later.

REINFORCEMENTS FOR INDIA.

On sanitary as well as upon military grounds the decision of the Government to send seasoned troops from India to replace young soldiers now serving in the South African war seems to be a wise step. According to a telegram from Calcutta it is stated that about 6000 troops, drawn in companies from the various regiments in India, are about to start for South Africa. These men, who are seasoned soldiers, will be replaced by young soldiers now serving at the front, so that there will be no further depletion of the British garrison in India.

DEATHS IN THE SERVICES.

Surgeon-General W. Nash, A.M.S. (retired), late Principal Medical Officer at Netley, on Jan. 19th, 1902, aged 63 years.

Correspondence.

"Audi alteram partem."

FIRST AID FOR PRIMARY HÆMORRHAGE THE WRONG INSTRUCTION GIVEN TO AMBULANCE CLASSES.

To the Editors of THE LANCET.

SIRS,—My former letter on "First Aid for Primary Hæmorrhage," in THE LANCET of Jan. 4th, p. 54, detailed cases such as have been under my own observation. Others have less directly come under my notice and some of your correspondents have confirmed me. I do not know whether the men who made the statements had attended classes held under the auspices of the St. John Ambulance Association or some other. If so, they may never have qualified for a certificate—indeed, have been unqualified "first-aiders." Yet it will scarcely be argued that their notions as regards improvised tourniquets can have been derived elsewhere than from ambulance classes. I have been referred to the "First Aid for the Injured," a copy of which, in its second edition, revised 1901, I have obtained from the St. John Ambulance Association. Examining this authority one finds both in the syllabus for the second lecture of the elementary course of five lectures (p. 7), and also in the text (pp. 76–104), that all the emphasis is laid on arterial hæmorrhage—i.e., the rarest condition of hæmorrhage to which the average pupil will have the opportunity of rendering first aid. The arrest of arterial hæmorrhage occupies 25 pages, venous hæmorrhage receives two pages, and bleeding from small arteries and veins, called "capillary hæmorrhage," half a page and a reference to "wounds." There are 15 figures in the text relating to arterial hæmorrhage, none to impress the mind regarding direct pressure with the hands, &c., for the more frequent kinds. 13 of the figures relate to tourniquets and proximal pressure on the large trunks, the remaining two being a duplicate of the knotted bandage for the scalp.

Why not instruct by concrete examples of arterial hæmorrhages drawn from the more frequently recurring cases in which elementary first aid might possibly render service? A man has cut his throat and just nicked his carotid, or been stabbed above the clavicle and blood is welling up, or the arm has been deeply cut into by machinery, or a butcher's knife has slipped and stabbed him in the femoral artery. Supposing the butcher's boy present at the last accident, he having attended an elementary ambulance class, which sort of instruction would now enable him to do something single-handed? That which has told him to lay the man down, to tear larger the cut in the clothes, to thrust the cleanest cloth at hand into the wound, and then to keep up pressure with fingers and fist until medical assistance comes—or a more elaborate demonstration where the lecturer has the class subject stripped, then one pupil is told off to press on the imaginary wound, a second to control the femoral

artery with his thumbs, and a third to prepare and to apply a tourniquet? May I put this question, How often can a lecturer get his class subject to bear the application of a tourniquet really tight enough to stop absolutely the arterial flow? Short of this, what does the demonstration amount to but of a partially tight tourniquet which in practice will indefinitely increase the hæmorrhage? It may be that this is the demonstration only too exactly imitated by some of the pupils.

Mr. J. B. G. Gidley-Moore asks me, in THE LANCET of Jan. 18th, p. 194, how I would deal with the case he quotes from the *Daily Mail* of a man who died before he could be taken to the hospital after having had *both legs* cut off by a chaff-cutter. I only know of the accident to *one arm* as seen in the country, the hand crushed by the rollers, or crushed and the fingers cut off. A hand was cut off and the bleeding arrested by plunging the forearm into a bag of flour. In a more extensive case a man's arm was drawn in to the elbow whilst the knives cut off his forearm in slices. Bleeding was checked by local pressure and he was taken two miles to a hospital where he got well. It must be some kind of very large chaff-cutter to draw in *both* a man's legs—they would first be crushed by the rollers before being cut off. The result would not be different from a railway accident. Owing to the shock and the crushed ends of the arteries there would be no great arterial hæmorrhage, so that the instruction to an elementary class as regards such an accident should be that elevation and local pressure is to be applied at once and the tourniquet reserved until the patient is anæsthetised and the surgeon is ready to explore the injury. Anything less than the rapid and efficient application of a tourniquet would only increase the bleeding and hurry on the end noted in the above case.

It is evident that elementary first-aid instruction would gain indefinitely and theoretical considerations drawn from surgical practice could be revised by the publication of reports of cases in which the nature of the accident, the time elapsing before the application of first aid, the exact nature of the first aid, the amount of instruction undergone by the person rendering it, and the condition of the patient when first coming under surgical treatment, should be fully set forth. After all, this last must be the final test as to what should be and what should not be the actual instruction given on elementary first aid. One must keep in mind the apostolic maxim about milk for babes and meat for strong men. The misapplication of tourniquets is another instance of the saying that "a little knowledge is a dangerous thing."

I am, Sirs, yours faithfully,

Brook-street, W., Jan. 21st, 1902. WALTER G. SPENCER.

To the Editors of THE LANCET.

SIRS,—May I be allowed to indicate some additional defects in "first-aid" instruction suggested by the discussion in your columns on "First Aid for Primary Hæmorrhage: the Wrong Teaching Given to Ambulance Classes"?

In the St. John Ambulance Association's manual, "First Aid to the Injured," 34 pages are devoted to instructing the pupil how to diagnose and to treat various fractures and dislocations. Apparently the pupil is expected, as a result of a course of lectures, to develop into a skilled diagnostician. He, obviously, cannot treat a fracture or a dislocation unless he has first ascertained that a fracture or a dislocation is present. If a surgeon who has had five years' training as a student, not to mention years of actual practice, can often only diagnose these injuries with the aid of a general anæsthetic or the x rays, it is hardly surprising to find that the holder of a first-aid certificate should be unable to make a correct diagnosis, and, if unable to diagnose the injury, of what use is his skill in applying different combinations of handkerchiefs and sticks to suit the particular injury which he imagines to be present?

The time-honoured story of the first-aid man who tied up the leg of an unconscious patient with a most artistic arrangement of umbrellas and handkerchiefs prior to removal to hospital, where the house-surgeon found the sound leg encased in umbrellas and the fractured leg looking after itself, is probably a statement of fact. How much better would it be for the injured members of the general public if the first-aid pupil were taught as follows: 1. It is not his business to attempt to diagnose fractures and dislocations. 2. He can do no good and may do harm by manipulating the injured limb. (The manipulations which have ultimately to be made by the surgeon are quite painful enough without subjecting the patient to a preliminary torture at the hands of the first-aid man.) 3. Unless the patient has to be moved from the site of the accident, the right thing to do is simply to support the injured limb in the least painful position, usually the arm in a sling, the leg on pillows. 4. When the patient has to be moved the whole limb should be immobilised, totally regardless of the first-aid man's diagnosis of fracture, dislocation, or other injury.

I should not envy the feelings of the first-aid lecturer who discovers one of his family who has injured a leg being put to considerable pain by the useless, and therefore unnecessary, manipulations of one of his first-aid class in a well-meant attempt to find out "what was the matter"; or even, as advised on page 45, trying to pull the leg into what he imagined to be its "more natural shape." When the manual proceeds to discuss the treatment, based on differential diagnosis, of unconscious patients who may be drunk, epileptic, apoplectic, faint, or what not, the ridiculous side of the question is seen at its best. The half-page of directions for general treatment of insensible patients includes nearly all that is either necessary or useful. Direction No. 2, to lay the patient on his back, is absolutely wrong—he should be laid on his side. If he vomits while on his back he stands a very good chance of sucking vomited matter into his air-passages. Add to the half-page of general directions instruction how to keep the patient warm, if convulsed to prevent him from injuring himself or biting his tongue, if the breathing ceases to perform artificial respiration after clearing the mouth and pharynx, and the first-aid man will know how to do practically all that is called for in the interests of the patient. Plenty of instruction is given in the methods of moving injured individuals, but very little stress is laid on the folly of moving a patient who is suffering from severe shock. The policy of "doing nothing" is not one that appeals to the enthusiastic first-aid man, nor, for the matter of that, to the general public. The two following cases which have occurred within the last 12 months illustrate the prevailing ignorance on this point. A man, severely injured by getting in front of a saluting cannon, was carried half a mile to a medical man's house, where he expired in 15 minutes. An infant, aged nine months, was carried over two miles to a hospital, on arrival at which the state of collapse was so great that it was impossible to think of undressing the patient, who never rallied and died at the end of seven hours. It cannot be too strongly pointed out that, in cases of very severe injury or excessive loss of blood, to carry about a patient, already nearly dead, is simply to obliterate any chance that there might be of recovery. The surgeon must be brought to the patient, not the patient to the surgeon.

Judging from the manual, the first-aid must be able to decide such trifling matters as fracture of ribs, injury of lung, and injury of the various abdominal viscera, including internal hæmorrhage. Arguing from the correspondence on the treatment of hæmorrhage, I expect to be told that for a man who attends only one course of lectures such diagnosis is impossible, but for a man who has attended several courses such diagnosis is simply child's play. It is easy to see why the general public, who are given to understand that the first-aid man can at once diagnose any of the above conditions, is apt to condemn as hopelessly incapable any medical man who does not make a diagnosis in five minutes. The surgeon who is called to an obscure case of injury to the abdomen must often long to be able to make his diagnosis with the ease and rapidity of the holder of a first-aid certificate.

I am, Sirs, yours faithfully,

Plymouth, Jan. 19th, 1902. C. HAMILTON WHITEFORD.

To the Editors of THE LANCET.

SIRS,—May I say a word as an old teacher of "first aid" on the subject of Mr. W. G. Spencer's letter in THE LANCET of Jan. 4th, p. 54? I feel sure a great deal of the present teaching of first aid is bad *because it attempts too much*. No doubt the time may come when the explanation of the anatomy and physiology of the human body may be usefully summarised in two or three lectures. But that day will not arrive until such subjects are taught as they ought to be taught in schools by a proper course of study and demonstration on dead and living animal tissue. First aid may, however, be learned without attempting to explain everything, by an appeal to knowledge which, as matters stand, is really not available. Take the case of a

bleeding vessel; as Mr. Spencer says, why not advise people to stick to local pressure alone as enough for the tyro to learn? or in the case of poisons, without inquiring too particularly as to their exact nature, to emetics? in the case of fractures to immobilising apparatus, and so on? To speak the truth, can any really practical knowledge be obtained without experience? I hold that the converse proposition lies at the root of almost all the useless education of to-day.

I am, Sirs, yours faithfully,

Dingwall, Jan. 20th, 1902. WILLIAM BRUCE.

THE ETHICS OF THE PUBLIC VACCINATOR.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Nov. 23rd, 1901, p. 1445 under the heading "The Ethics of the Public Vaccinator," a correspondent states as follows: "A public vaccinator can claim no payment for vaccination of persons residing outside his district." Is this a fact? and will you kindly explain the law on the subject?—I am Sirs, yours faithfully,

FREDERICK WILLIAM AXHAM.

Glasshouse-street, W., Jan. 20th, 1902.

*** The law is contained in Section 11 of the Vaccination Act of 1867.—ED. L.

THEATRES AND THE SAFETY OF THE PUBLIC.

To the Editors of THE LANCET.

SIRS,—Amongst all the wise precautions against danger from fire in theatres which are being insisted upon or suggested there is one point, and that the most essential of all, that is persistently overlooked. When fire breaks out in a building the most pressing and the most rapidly acting danger of all is that of suffocation. Why on earth do not architects and others responsible for the construction of theatres face this question? What is needed is the means of letting out the fumes at or near the roof—in other words, a capacious chimney. In a theatre this could be done without extreme difficulty or cost. The part of the theatre over the stage rises higher than the auditorium and might on three sides, possibly on four, have large venetian shutters which, when open, might give some 300 square feet of opening which would allow the fumes to escape and so provide 15 or 20 minutes of safety for the escape of the audience. At the same time fresh air would be drawn in over the escaping audience and prove another factor working for safety. These louvres should be in charge of a man or men during the whole performance who in case of need could readily open them by means of a lever, and they should be opened for a time after every performance so as to clean out completely the used-up atmosphere and thereby add to the comfort and the wholesomeness of the building. I am, Sirs, yours faithfully,

Leeds, Jan. 21st, 1902. T. PRIDGIN TEALE.

To the Editors of The Lancet.

SIRS,—I see that in a leading article in THE LANCET of Jan. 18th, p. 173, you say that the London County Council is "determined" to check the overcrowding of the gangways of theatres with spectators during the performances. I do not know how long the London County Council has been fired with this salutary resolution, but I think that if any county councillor will go during a performance to any of the London theatres which are doing really well and will inquire for seats in the pit or upper circle or in any of the cheaper parts of the theatre, he will get the answer, "Standing-room only," or be solicited with the offer of "good standing-room," and will find that scores of his fellow citizens are availing themselves of such offers as a matter of course. A few weeks ago I was present myself at the last performance of a popular play at the Haymarket Theatre and sat on a step in a gangway crowded to suffocation which I fancy would have become a scene of considerable danger had there been an alarm of fire. Theatrical managers naturally do what they are allowed to do in the direction of making money, and I should suggest that the determination of the London County Council will have little result unless it is energetically carried out.

By the way, I was present during part of the Krause trial on Friday last and your recent remarks on the ventilation of the Old Bailey seemed to have had considerable effect. The public gallery was nearly empty and so were the gangways. The seats were not more than full and windows widely opened at the end of the court opposite the jury box admitted a good deal of fresh air from which unusual intruder some of those persons nearest to it sought to protect themselves by putting their pocket-handkerchiefs over their heads. I am, Sirs, yours faithfully,

Jan. 20th, 1902. A MEMBER OF THE BAR.

REMOVAL OF THE APPENDIX VERMIFORMIS.

To the Editors of THE LANCET.

SIRS,—Will you permit me to express my agreement with the arguments of Mr. W. H. Battle in his article in THE LANCET of Jan. 18th, p. 143, on the advisability of removing the appendix vermiformis after suppuration caused by appendicitis? It is obvious that no surgeon would advocate the removal of the appendix if the mere evacuation of the abscess sufficed to ensure a complete and lasting recovery. Mr. Battle's seven cases prove that in many instances the diseased appendix when left behind may not only retard healing but may give rise to dangerous recurrence of the abscess at a later period. My own experience is in entire accord with this. Although in many, perhaps the larger proportion, of appendicular abscesses treated by simple drainage the wound heals and no further trouble results I am convinced that in many cases the appendix left behind considerably prolongs suppuration, retards healing, and remains a source of present discomfort and future danger.

The cause of this lies in the frequency with which the appendix contains one or more concretions. This is clearly shown in Mr. Battle's instructive series of cases. I cannot, however, agree with him when he says that "the appendix should be removed as soon as possible after the healing of the abscess." On the contrary, I agree with the contention of Mr. J. Rutherford Morison that the appendix should be and can be removed in almost every case of suppurating perityphlitis at the same time that the abscess is evacuated. Without denying that in some few cases the procedure may be impracticable or unadvisable owing to the general state of the patient, I am convinced by my own experience that in the majority of instances it is neither difficult nor dangerous to remove the appendix in addition to evacuating the abscess at the same operation. The main obstacle to this procedure in the minds of surgeons—the risk of infecting the general peritoneal cavity and setting up general peritonitis by breaking down adhesions in the search for the appendix—is more imaginary than real, if I may judge by numerous experiences. So long as extravasation of pus into the loin and pelvis is prevented, as it easily can be by proper packing, adhesions may be broken down freely among the coils of small intestine with positive advantage, because pus shut off in separate recesses which would otherwise remain is often evacuated in this way; indeed, in severe cases where the peritonitis is spreading I regard free separation of adhesions and evacuation of pus as the most important part of the operation.

I am, Sirs, yours faithfully,

Wolverhampton, Jan. 20th, 1902. EDWARD DEANESLY.

GENERAL POST OFFICE APPOINTMENTS AND INCOME-TAX.

To the Editors of THE LANCET.

SIRS,—I am holding the appointment of medical officer to the post-office here at the usual General Post Office rate, but every Christmas quarter there is a deduction made from the amount in the proportion of **1s. 2d.** in the £ on the year's gross receipts due to me.

I have written various letters to the authorities complaining that as the amount is due as a subscription or club it is in no sense a net profit accruing to me, but nothing has been done in the matter and each year sees the same thing recur. Probably you or some of your readers will tell me what is the best course to pursue both for myself and the profession at large, for it is certainly unfair that the Government should expect the profession to attend post-office officials (some of whom earn large incomes) at a charity fee and then to deduct

quite an unnecessary amount from that small fee due to them.

I am, Sirs, yours faithfully,

Cullompton, Devon, Jan. 19th, 1902. G. G. GIDLEY.

*** Our correspondent, when making his annual return for income-tax purposes, must include his income "from all sources," that from his appointment as medical officer included. He may claim the repayment of the duty deducted by the Post Office authorities (provided, of course, that he has paid income-tax on the return made by him), and should direct his claim for repayment to the Secretary, Inland Revenue (Repayment Branch), Somerset House, W.C. We presume his statement "every Christmas quarter" at 1*s.* 2*d.* in the £ refers to last Christmas only.—ED. L.

THE SANATORIUM TREATMENT OF CONSUMPTION.

To the Editors of THE LANCET.

SIRS,—A few words will suffice in dealing with Dr. Arthur Latham's references to my letter. I am informed that there is nothing to support my "deduction" that a patient must spend two or three years in a sanatorium. I never made it. I merely quoted the words of Dr. Clifford Allbutt *verbatim et literatim* who declared that this length of time was necessary for the obsolescence only of the disease. The attitude of Germany I have (and want) nothing to do with. Suffice it to say that Germany has had 40 years' experience of sanatoriums and has not made the progress we have who have relied exclusively on works of sanitation. Dr. Latham says that I recognise sanitary defects as the main etiological factor in consumption, and yet object to the removal of patients from such debilitating influences to the "fresh air" of sanatoriums. What I said was that, having recognised the cause, you should remove *it* and not the patients. I claim that the money squandered on sanatoriums which could be used for striking at the root of the trouble is badly spent. It may be that these institutions form "only one of the lines along which we have to work," but I have yet to learn that any serious effort has been made by the association at their own expense to clear away insanitary dwellings and remedy sanitary defects. The modern notion is not to trust to tried methods but to convert the earth into a mighty limbo for the aggregation of cases of infective, and so-called infective, diseases the occurrence of which could and should have been prevented. I am sorry I said something which had been already said by Sir John Burdon Sanderson. I tender that gentleman my apologies for having presumed to think in the same grooves as himself.

Now for the "fresh air" of sanatoriums. I regard it as a humiliation that latter-day "scientists" are prepared to do battle for a theory which is consumed at its own focus. The tubercle bacillus is or is not a pathogenic organism. Is it only pathogenic when it is desired to terror-strike governments into the passing of compulsory laws? to obtain powers for the wanton destruction of the country's foodstuffs? to intimidate municipalities? and does its pathogenicity stop at the doors of the sanatorium? Does the *circulus citiosus* become converted into an angelic halo when once the patient has taken up his abode? I leave Dr. Latham's assertion that in the midst of the coughing and spitting sanatorium crowd there are considerably fewer tubercle bacilli than in an ordinary dwelling to the judgment of your readers. The bactericidal properties of the sunshine which, of course, finds its way into all sanatoriums, even in our *triste* climate during the winter months, prevents the "spread of infection," &c. One wonders if, in addition to forming a corner in fresh air, the association has taken out Royal Letters Patent for the exclusive manufacture of sunshine during the winter months. But this organism, the pathogenicity of which justifies sanitarians in demanding the most preposterous restrictions, leaves the medical and surgical staffs of Brompton Hospital severely alone, although tubercle bacilli are found there in enormous numbers. It does not touch the stationary inhabitants of health resorts frequented by consumptives, although these poor creatures in search of health are hunted from place to place, forbidden to land, and shut out of hotels by the panic-mongering of public health enthusiasts who are supposed to take a kindly interest in their fate. The theory of the infectivity of consumption shares with the "endogenous spore-formation" theory the honour of being a means to an ignoble end. When the assertion that spitting at large constituted a terrible public danger was referred back to the scientists who had proclaimed that exposure to one minute's sunlight killed the tubercle bacillus we were told that the real danger lay not in the bacilli, but in their practically indestructible spores, which delectable theory left a distracted world without means of escape. It was not necessary that these spores should ever have been *seen*. The new method of philosophising is to start a theory and then invent facts to fit it. In the fulness of time somebody had the courage to doubt the existence of these spores, and now the theory is given up. I am advised to apply to one of the London isolation hospitals for a refutation of my argument that aggregation is bad. I shall there learn that "the sequelæ and complications compare favourably with those which obtain in ordinary houses." Secondary infection and post-scarlatinal diphtheria never do obtain in ordinary houses. They are the fruits of aggregation solely. I can assure Dr. Latham that he will have to look beyond these islands—beyond the continent of Europe—before he finds any evidence which will justify the existence of the aggregation hospital.

Now if a patient of the so-called isolation hospital falls a victim to secondary infection during a residence of a few weeks, how shall the sanatorium patient escape who is kept within striking distance of the cause of his disease for two or three years? If the organism does not strike there can be but one explanation, which is that it is powerless to strike and the theory of infection cannot be logically held. To enter into the pretence that there is some skill in sanatorium treatment which cannot be acquired by a man of average intelligence without serving an apprenticeship deserves to be called by a name which describes it passing well.

There is no more need for large "special" hospitals than for "special" physicians. The Nordrach Institution had a world-wide reputation while its construction was primitive in the extreme, consisting of a pair of villas with an old, disused factory as an addendum.

A word in conclusion. The profession will do well to adopt an even more cautious attitude than usual towards published sanatorium statistics. We heard the other day of 14 out of 40 sanatorium "cured" patients being dead and one *in extremis* within 12 months of their discharge. The figures were published by patients' friends—not by the authorities of the sanatorium.

I am, Sirs, yours faithfully,

Nottingham, Jan. 16th, 1902. EDWARD DEAN MARRIOTT.

"MUNICIPAL AUTHORITIES AND THE FEEDING OF INFANTS," AND "THE INFLUENCE OF MATERNAL FACTORY LABOUR ON INFANT MORTALITY."

To the Editors of THE LANCET.

SIRS,—In preparing the numbers of Vol. CLXI. of THE LANCET for binding I notice an annotation under the first of the above headings at p. 608 of your issue of August 31st, 1901, and at p. 814 of that of Sept. 21st, 1901, a letter by the health officer of Norwich (Dr. H. C. Pattin), to which, by your indulgence, I desire to make brief reference. In your annotation you characterise the circulation at Norwich and Darwen of a leaflet on the subject of infant feeding as a "most salutary *precedent*," whilst Dr. Pattin in his communication refers only to those issued at Nottingham, Newington, and by the National Health Society. Permit me to observe that this Norwich "precedent" is (like the present letter) a somewhat belated one, as for many years most excellent leaflets on this subject have been circulated by the Corporation and Sanitary Association of Manchester, and also by the East London Hospital for Children and the Liverpool Infirmary for Children. In addition, the Corporation of Stockport in 1899 widely circulated a similar publication which had been edited by the local medical society; hence your allusion to the Norwich and Darwen circulars as a "precedent" is unintentionally, but obviously, inaccurate. Let me also at once say that I am quite sure Dr. Pattin had no wish to ignore what has been done elsewhere and was no doubt unaware of it, though in regard to Stockport the facts are alluded to in the *British Medical Journal* of June 2nd, 1900, p. 1388, and

also in a prominent leading article in the same journal of July 7th, 1900, p. 38, on "Infant Feeding and Maternal Education," as well as in *Public Health* for February, 1901.

In reference to this question of maternal education, I think it is due to the progressive Corporation of Stockport to place prominently and distinctly on record to its credit the fact that it is the first and only body that has hitherto attempted to grapple practically with the question, as at the discussion on Infant Mortality at the Cheltenham meeting of the British Medical Association the teaching of infant hygiene was advocated by more than one speaker without any reference to the fact (of which at least two of them were fully aware) that such instruction was already being systematically given in the elementary schools at Stockport. On Feb. 1st, 1900, the teachers of that town, together with one of H.M. Inspectors of Schools (Mr. F. T. Howard, M.A.), met the sanitary committee by invitation, and the outcome of the conference was that the teachers unanimously agreed to arrange for the instruction of the elder girls in the feeding and management of infants, using as their guide a booklet (copy herewith), drawn up at their request by the writer and supplied by the sanitary committee. The committee also offered a money prize to each school in which the subject was taught, and supplied approved forms of feeding-bottles, &c. A trained health visitor was appointed who visited each school occasionally to supplement by demonstration and otherwise the instruction given by the regular teachers. My successor (Dr. Meredith Young) states that the system thus inaugurated works excellently, and personally testifies to the soundness and satisfactory result of the teaching, whilst the sanitary committee is not a little proud of the real "precedent" which its action has furnished.

I further desire to refer to Dr. G. Reid's suggestion[1] that mothers should not be allowed to return to work in factories for at least three months from the date of their confinement, as they would then probably suckle their babes till the most precarious period of life had been tided over. In Stockport, where the infant mortality was very excessive, I found on personal analysis of 5101 deaths of infants during 1890-99 that as many deaths (one-fifth of all) took place in the first month of life as in the second and third together, whilst three-fifths of all occurred during the remaining nine months, these figures closely conforming to those at pp. 11-17 of the Registrar-General's Annual Report for 1891. Having regard to the food- and comfort-yielding value of the mother's earnings, is it, therefore, worth while to advocate a measure that cannot possibly benefit four-fifths of the infants that at present die? And has it ever occurred to Dr. Reid that such prolonged idleness would inflict great and useless hardship on a large number of mothers whose infants die within a few days of birth, or long before the expiration of the suggested three months? Is it not, moreover, a fact that in 1893 or thereabouts a special sub-committee of the Council of the British Medical Association found itself unable to recommend this measure and that after careful inquiry by the Home Department the then Home Secretary (Mr. Asquith) decided against it? Judging from the enormous number of deaths from "prematurity," "low vitality at birth," &c., as well as from personal knowledge of the conditions of factory life, I am inclined to think that any legislative change, if such be practicable, should be in respect of pregnant women who often continue to work in the mills almost to the hour of their confinement. With regard to *crèches*, which Dr. Reid also recommends, they have been tried with most intensely disappointing results in Liverpool and other places, for the simple reason that mothers will not use them, preferring to pay as much as 4*s.* per week to some ignorant neighbour to look after their babes. The strict enforcement and extension of the Infant Life Protection Act, together with the instruction of those who in the near future will become mothers, seem to be the most hopeful means of dealing with this national evil.

Apologising for the length of this communication on a subject which has for many years been of special interest and official importance to me,

I am, Sirs, yours faithfully,

CHARLES PORTER,
County Medical Officer of Shropshire; late Medical Officer of Health of Stockport.

Shrewsbury, Jan. 14th, 1902.

*** Dr. Charles Porter encloses some admirable leaflets dated 1899 and a pamphlet dated 1900. The word "precedent" was obviously incorrect and we think it well to apologise in advance to any municipality that may have issued leaflets previously to the sanitary authorities of Stockport.—ED. L.

[1] THE LANCET, August 24th, 1901, p. 549.

THE RELATION OF THE CHURCH TO SANITARY REFORM.

To the Editors of THE LANCET.

SIRS,—The suggestion of "Vicar" in THE LANCET of Jan. 18th, p. 192, is most valuable—viz., that the edge of the chalice at the celebration of the Holy Communion should be wiped with a fair linen cloth between each administration. It will, I hope, become universal. Although the use of separate cups would, of course, absolutely eliminate the dangers of infection, yet it is extremely improbable that such a custom would ever find favour except among very few—in fact, though it is now some two or three years since the idea was suggested I have never heard of its being adopted except in a very few Dissenting places of worship. Rightly or wrongly, the "usages" of churches of the Establishment are governed mostly by tradition—ancient in all cases and in some supposed to be primitive: tradition first, sanitation, or what you like, second. Witness the almost unanimous opposition of the Church to cremation. Moreover, in many churches, and not only in those of the most "advanced" type, it is the custom for the celebrant not only to consume the wine that may be left, but also to rinse the emptied chalice and drink the rinsings—so great is the veneration (and surely no charitable person would sneer at it) in which the consecrated elements are held. How could this be done with a multitude of little cups?

I am, Sirs, yours faithfully,

Wherstead Vicarage, Ipswich, Jan. 20th, 1902. R. A. L. NUNNS.

THE ESTIMATION OF THE EFFICIENCY OF VACCINATION BY THE SCAR AREA.

To the Editors of THE LANCET.

SIRS,—The method of estimating the efficiency of a vaccination by the area of the scars produced seems to me unsatisfactory for the following reasons. By employing an aseptic lymph and by taking rigid precautions against sepsis throughout the course of the vaccinia, it is, I believe, possible to obtain good vesicles which will dry up without ever becoming pustular and which will leave hardly any scar at all. Results approximating this ideal I myself have obtained in a considerable number of cases of secondary vaccination by the following method. The operation having been performed with the usual aseptic precautions, a dressing of dry boric acid lint was applied and fixed with strapping. At the end of six days or a week, when the vesicles were well developed, this dressing was removed, the arm bathed with antiseptic lotion, and a dry dressing of bicyanide gauze applied. When examined about 10 days later the pocks would be found to have scabbed over, the scabs being adherent to the gauze. It was then only necessary to cut the gauze so as to leave a circular piece adherent to each scab. When the latter fell off in the ordinary way it left only a very small scar indeed. In one case, for instance, although large vesicles developed, the spots when examined two months after presented small patches of hyperæmia not more than a third of an inch in diameter in which four or five little areas of scar tissue of about the size of a pin's head could be seen.

If, on the other hand, vaccination is performed without any special aseptic precautions the vesicle will become a pustule, the pustule an ulcer, a considerable portion of the corium will be destroyed before healing takes place, and thus a large scar will be produced. Now, I take it, that all bacteriologists will admit that pustulation is effected by the entry of pyogenic organisms into the vesicles. It appears to me, therefore, that the size of the resultant scar in vaccination depends almost entirely on the extent to which these organisms have been at work. I am thus driven to one of two conclusions, either that suppuration in the vesicle is not an essential of vaccinia, but is merely the result of sepsis and that, therefore, a large scar is of no value except as evidence of insufficient care, or that the action of pyogenic organisms is

essential to the prophylactic action of vaccination since it is by their action that the required area of scarring is produced. If the latter conclusion is the right one, attempts to exclude these micro-organisms from the lymph by treatment with glycerine, and from the skin by aseptic precautions, would tend only to defeat the object we have in view.

I am, Sirs, yours faithfully,

HENRY W. P. YOUNG, M.D., D.P.H. Cantab.

Norbury, S.W.

"LOOKING BACK":[1] "ON BATHING" THE SKIN AS AN ABSORBENT ORGAN.

To the Editors of THE LANCET.

SIRS,—This problem, which was discussed in THE LANCET in 1824, recalls the recollection that it was the subject of my first contribution to medical literature. It was published in THE LANCET in 1839. I was then a student at St. George's Hospital. In a surgical ward a man took a bath containing tartar emetic. This induced severe vomiting. It might be objected that the man swallowed some of the bath-water. I saw no evidence of this, and was satisfied that he had absorbed enough through the skin to cause the vomiting. The case made a lasting impression on my mind as an instructive example of the absorbent property of the skin. It may be regarded as a beautiful experiment, rich in therapeutical suggestions. I have often turned it to useful account in practice.

The eliminating and in-taking functions of the skin, as of other organs—for example, the lungs—are influenced by the balance between repletion and vacuity. Experiments on the absorbent power of the skin must be ruled by this law. If the vascular system is replete absorption is arrested, and inhalation, aerial and liquid, is active. And *vice versâ*, if vacuum is the dominant condition then inhalation or in-drawing is active. It is not a little remarkable that this question of the absorbent capacity of the skin which was discussed in THE LANCET in 1824 should still remain undetermined after 78 years of physiological and pathological observation. The physician has, however, adopted it more or less directly in practice. But the pure physiologist of to-day, if we may take Sir Michael Foster as an authority, still looks doubtfully upon the absorptive power of the skin. He says: "In the case of the sound human skin the balance of conflicting evidence is in favour of the view that soluble non-volatile substances are not absorbed." But surely the problem may be definitely solved by well-directed experiments which take due account of the law that nature abhors a vacuum.

I am, Sirs, yours faithfully,

Jan. 15th, 1902. ROBERT BARNES.

AN UNUSUAL COMPLICATION OF INFLUENZA.

To the Editors of THE LANCET.

SIRS,—In answer to Sir John W. Moore's question in THE LANCET of Jan. 18th, p. 191, respecting "An Unusual Complication of Influenza" which I reported in THE LANCET of Jan. 11th, p. 89, I may say that there was no symptom of typhoid fever, and that the temperature was never above 100° F., and the pulse never above 110.

I am, Sirs, yours faithfully,

J. G. CARRUTHERS, M.R.C.P. Edin.

South Norwood, Jan. 20th, 1902.

A DANGEROUS PRINCIPLE.

To the Editors of THE LANCET.

SIRS,—Continuing the correspondence which has taken place under the above heading in THE LANCET of Dec. 21st, 1901, p. 1764, and Jan. 11th, 1902, p. 121, I beg to trespass further on your indulgence by requesting you kindly to insert the following copy of a letter directed by me to the Under Secretary of State, Home Office, Whitehall, on Jan. 17th, 1902:—

SIR,—I have the honour to acknowledge and to thank the Secretary of State for his letter B37039—8, dated the 16th inst., informing me "that the Council of the Royal College of Surgeons in Ireland allow to Licentiates the privilege of perusing the charters, by-laws, and ordinances, &c., of the College, as printed in one volume, and that" I "have availed myself of an offer of this privilege, but that the Licentiates are not entitled to be supplied with copies of such charters, by-laws, &c."

On this ruling of the Council I will only say that it cannot but prove highly inconvenient to such Licentiates as may require professional collegiate guidance outside this portion of His Majesty's kingdom; for instance, in England, Scotland, the Colonies, or British Dependencies.

On the other hand, I beg respectfully to point out to the Secretary of State that in my letter to you [of Jan. 9th] I quoted for his information a letter of the Secretary of Council of the College [dated Jan. 2nd] addressed to a *Fellow* of the Royal College of Surgeons in Ireland, stating "that there are no copies of the by-laws available. A new edition is being prepared, but it will take some time to bring out this edition as several changes are contemplated in the by-laws and charters."

I would also add, in reference to the present attitude of the Council in withholding a copy of the by-laws from the Licentiates, that I hold a communication from the secretary of that Council dated June 21st informing me that "the *revised* by-laws are being printed and as soon as they are ready" I "can have a copy." On June 21st I was, and continue to be, a Licentiate. It is evident that since that date the *opinion* of the College as to the advisableness of issuing its by-laws to Licentiates has *changed*.

Respecting the special copy of "charters, by-laws, and ordinances, &c.," which Licentiates have "the privilege of perusing," I have to observe that I inspected the said copy so far back as Feb. 25th of last year—a date subsequent to the February, 1901, Fellowship Examination—and in May of last year another Licentiate of the College also inspected and took notes from the volume [dated January, 1826] proffered him by the Registrar, R.C.S.I. This Licentiate is prepared to corroborate my statement in the following special particulars.

(A.) In the Charters the following is laid down both in those of 1844 and 85, pages 43 and 59 respectively: "And the examiners, or any number of them declared by the by-law to be competent to transact business as a court of examiners, shall in the presence of the President, or, in his absence, of the Vice-President and two or more Members of the Council, examine ..... any candidate for a Fellowship."

(B.) In the by-laws no mention is made in them of the number "declared ..... to be competent to transact business," unless an "educational ordinance" or other "ordinance" can be regarded as such. These, however, are printed in the volume referred to as a class of rules, differing from by-laws, and I should imagine if they have not received the sanction of the Secretary of State as required by the Charter of 1844, or the sanction of the Lord Lieutenant of Ireland as required by the Charter of 1885, they cannot be regarded as by-laws. (There is no evidence of such sanction.) In fact, pages 62 to 66 are specifically intituled on each page as "By-laws," and under the heading of the title "By-laws of the Royal College of Surgeons in Ireland" (page 62) may be read "which have received the approval of the Queen in conformity with last Clause of Sec. 7 of Supplemental Charter."

(C.) In the Ordinances it is true the number of examiners is laid down.

(D.) In the Educational Ordinances the following appears at page 106 of the volume:—

FELLOWSHIP EXAMINATIONS.

"*Presence of Councillors:* The President or Vice-President and two Members of Council shall be present at the Oral Examination," &c. My contention, therefore, is that the President, Vice-President, and Council of the Royal College of Surgeons in Ireland at the Ordinary Fellowship Examination of February, 1901, did not observe their charters or their by-laws if it be conceded that the educational ordinances can be classed as such, and I would respectfully urge upon the Secretary of State to give me the reply to my letters of Dec. 9th and 14th, in which I ask specifically if the corporate body concerned deny the accuracy of my statement that the witnesses prescribed were not present on the occasion stated. I subsequently referred to this question on Dec. 18th as being not a *personal* but a *constitutional* one, and I contend that it is made in the best interests of the College itself and of the vast body of Fellows and Licentiates which it is empowered by the Crown to make and to control.

I have the honour to be, Sir, your obedient servant,

S. WESLEY WILSON.

P.S.—Kindly see affidavits sent Oct. 22nd: (*a*) As to non-observance of charters; (*b*) method taken by a Fellowship Examiner to procure Fellowship candidates for his son's tuition.—S. W. W.

My apology is due to you for thus far trespassing on your space, but I do so that the profession generally will recognise the justice of the claim that Licentiates have privileges which must not be foregone by a corporate licensing body, however strenuously such corporate body may endeavour to ignore the fundamental principles of its existence and the legal carrying-out of functions for which it is responsible to the State.

I am, Sirs, yours faithfully,

Dublin, Jan. 18th, 1902. S. WESLEY WILSON.

BEEF WORM IN THE ORBITAL CAVITY.

To the Editors of THE LANCET.

SIRS,—In the account of his case of Beef Worm in the Orbital Cavity in THE LANCET of Jan. 4th, p. 19, Mr. T. W. F. Gann is under the impression that the case is unique. May I be allowed to draw his attention to an almost identical case already recorded (with very instructive illustrations) by Dr. Fred. Keyt, assistant colonial surgeon, British Honduras, a colleague in the same colony and in the same service?[1] Under the circumstances it is singular that this earlier

[1] THE LANCET, Jan. 4th and 11th, 1902.

[1] Vide Brit. Med. Jour., Feb. 10th, 1900.

record should have escaped Mr. Gann's observation, but, of course, allowance must be made in such matters for the exigencies of "bush life." There is, however, I fear, a growing tendency on the part of some to ignore the work of others. This may be due to the number and voluminous character of our works of reference, to which the pressure of work makes it impossible for many to refer. But one cannot help lamenting this tendency to overlook or ignore the painstaking work of others, not alone because one likes to see credit paid where credit is due, but because one is loth to see the fairer courtesies which always existed between members of our profession in danger of being brushed into oblivion. Thus a noble calling may soon degenerate into a "pushful" profession.

I am, Sirs, yours faithfully,
GEORGE FERDINANDS, M.D. Aberd.

Aberdeen, Jan. 8th, 1902.

CANCER AMONG HINDOOS.

To the Editors of THE LANCET.

SIRS,—With reference to Mr. C. B. Keetley's letter in THE LANCET of Jan. 18th, p. 192, on this subject I append the names of the three or four accredited booksellers in London from whom the annual reports of the medical institutions of India may be obtained. Mr. E. A. Arnold, 37, Bedford-street; Mr. B. Quaritch, 15, Piccadilly; Messrs. Constable and Co., 2, Whitehall-gardens; Messrs. Sampson Low and Co., St. Dunstan's House, Fetter-lane; Messrs. Luzac and Co., 46, Great Russell-street; and Messrs. Kegan Paul, Trench, Trubner, and Co., Charing-cross-road.

I hope this will partly mollify Mr. Keetley. As I am on the eve of leaving for India and have none of my works of reference at hand I am unable, except on my own *ipse dixit*, to give him the proper and more scientific—*ergo*, more up-to-date—definition of the word "Hindoo." On my arrival at my destination in Madras I shall, if the subject is still open in your columns, remedy my present inability.

Do not any of Mr. Keetley's dictionaries (those of an encyclopædic character) clear up the point "whether the Mahomedans circumcise or not"?

I am, Sirs, yours faithfully,
C. DONOVAN, B.A., M.D., B.Ch. R.U.I.,
Captain, I.M.S.

Instow, N. Devon, Jan. 21st, 1902.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Jan. 18th, p. 193, I notice a statement to the effect that Jews are less prone to cancer than other civilised peoples. This statement is certainly erroneous so far as the Jews in the United States are concerned; and it seems to me that the balance of evidence is against its acceptance as applied to most other countries. Dr. Billings' statistical reports show that in the United States the Jewish mortality from cancer is almost the same as that of the rest of the white population. He gives the cancer mortality per 1000 deaths for Jews and Gentiles as follows:—

	Jews.	Other U. S. Whites.
Males	13·58	13·09
Females	21·65	23·59

It was the opinion of the late Sir B. W. Richardson—who had considerable experience among London Jews—that they were as prone to cancer as other London people. Billroth's experience in Vienna and elsewhere coincides with this. Moreover, from observations made by Bauby in the neighbourhood of Toulouse, it appears that pork-eaters are no more prone to cancer than those who feed on other kinds of meat.

I am, Sirs, yours faithfully,
Clifton, Bristol, Jan. 18th, 1902. W. ROGER WILLIAMS.

IS SALT A PROBABLE CAUSE OF CANCER?

To the Editors of THE LANCET.

SIRS,—The interest which has been created by the publication in your influential paper of Dr. James Braithwaite's theory with regard to salt being a cause of cancer has been very marked, and as a number of other newspapers have commented on the subject the idea seems to be gradually spreading abroad that what has hitherto been considered and proved to be a wholesome and necessary article of diet is in fact a thing to be shunned and avoided as dangerous. Dr. Braithwaite says the idea originated in his mind by his noticing the comparative immunity of the Jews from this disease, and explains it by the difference in their diet, which he says consists mainly "in the absence of bacon and ham from the diet of the Jews."

I think all your readers must admit that Dr. Braithwaite in his very interesting paper has conclusively proved that in those sections of country where a very large amount of bacon and ham is consumed the disease of cancer is most prevalent, and I merely write to suggest that it is possibly not the salt, but the unclean bacon and ham, that is responsible for the scourge, and as I have lived on the other side of the Atlantic for a number of years and know something of the manner in which pigs are fed over there I cannot see how it can possibly be otherwise. The greater part of the bacon and ham consumed in this country is imported from the United States and Canada, and it is a notorious fact that at many slaughter-houses in those lands the pigs are habitually fed on the entrails and blood of slaughtered animals. Unfortunately, owing to a very imperfect system of cattle inspection, some of the cattle which are killed there are infected by diseases of a cancerous nature, and if the pigs are fed upon the entrails of such animals it follows that their bodies are likely to become impregnated with the effects of such a diet, and if Englishmen persist in eating the flesh of such a carnivorous animal so impregnated they will probably reap the consequences, while the Jews who refuse to eat such food will naturally be exempt from such disease.

In the Revised Statutes of Ontario, chap. 248, sec. 108, the sanction of the Provincial Government is given to the feeding of pigs with blood, offal, and the meat of any dead animal, but the Act provides that they must not be fed on *decomposed* or *putrid* blood and offal, and that these must be steamed before feeding the pigs. It further provides that if the medical health officer discovers that the pigs have been fed upon putrid offal, then he has power to destroy such pigs so as to prevent them from being used as food for man. It is not a place, however, where the medical health officer likes to spend much of his time and therefore the inspection is not very rigid. It has become rather fashionable in recent years to impugn the accuracy of the Bible in many respects, but those portions of it which call our attention to the inadvisability of indulging in 'swine's flesh may be well worthy of consideration in the light which has been thrown on the subject by the statistics in Dr. James Braithwaite's exhaustive paper. Any information which may be the means of putting us on our guard against this terrible disease must be hailed with satisfaction.

I am, Sirs, yours faithfully,
Hanover-terrace, W., Jan. 22nd, 1902. R. D'OYLY NOBLE.

MEDICAL APPOINTMENTS UNDER THE LONDON SCHOOL BOARD.

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Dec. 14th, 1901, p. 91, the London School Board advertised for "two oculists (of either sex) for the purpose of testing the eyesight of the children in the senior departments of the schools of the Board and for giving such advice and taking such steps thereon as may be desirable." The salary offered was 100 guineas and the work was expected to be completed in one year. The statement of duties expected being a little vague, I therefore wrote for further details. In reply regret was expressed that no further details could be given. I sent in an application with required testimonials and references. After some days I received the inclosed letter which, I think, might be of interest to the profession. Evidently experience is not considered a necessity, or such a handsome remuneration for so much important work would not be offered, seeing that practically all one's time would be required to carry out the duties.

I am, Sirs, yours faithfully,
Jan. 18th, 1902. A RETIRING CANDIDATE.

[INCLOSURE.]

SCHOOL BOARD FOR LONDON.
Victoria Embankment, W.C., 17th January, 1902.
POSTS OF OCULISTS.

DEAR SIR (OR MADAM),—I am directed to state that the committee have favourably considered your written application, but as they think it possible from your standing in your profession that you may not

have fully appreciated the conditions of the appointment, they wish before inviting your attendance to make it clear to you that this appointment will require you to pay visits to schools for 400 school sessions from 9.30 to 12 and from 2 to 4.30, together with the digesting of the information and the drawing-up of reports concerning such visits in the time outside school hours.

The committee might be willing to allow this work to be spread over two years, instead of one year, if you are unable to give up so much time as the 400 visits in one year would require, but they wish the work to be finished in one year if possible, and they would prefer to make the appointment in such a case for one year only, offering a remuneration of 50 guineas for the payment of such 200 visits. If you are still an applicant for the post of oculist under the conditions as above explained they will be glad if you will appear before the sub-committee on Tuesday, Jan. 28th, 1902, at 11.30 A.M.

Faithfully yours,
For G. H. CROAD, Clerk of the Board (H.S.W.).

THE DESTRUCTOR NUISANCE AT TORQUAY.

(BY OUR SPECIAL SANITARY COMMISSIONER.)

THE INHABITANTS PETITION FOR AN INVESTIGATION.—THE EXPLANATIONS GIVEN BY THE LOCAL AUTHORITIES IN ANSWER TO THE COMPLAINTS.

A CONSIDERABLE number of the inhabitants of Torquay have complained bitterly of the nuisance occasioned by the refuse destructor recently built in that town. After many endeavours to obtain from the town council an abatement of this nuisance a petition was sent to THE LANCET which was drawn up in the following terms:—

We, the undersigned inhabitants of the borough of Torquay, injuriously affected by the smoke fumes and gases ejected from the refuse destructor and having after repeated efforts failed to obtain from the town council the promise of adequate remedial measures, respectfully petition the Editors of THE LANCET in the public interest to send a commission to inquire into matters so vitally affecting the health of Torquay and to point out what measures must be taken to safeguard the purity of the air.

This petition bore 70 signatures, including the names of several medical men and prominent residents, and more signatures, it was stated, could easily have been obtained if more time had been devoted to collecting them. Some of the signatories declared that they would willingly have removed to another quarter or to another town, but, having purchased their houses or rented them on a long lease, they were unable to do so. They protested that their health was seriously affected, and they were convinced that this was due to the destructor, because they had not suffered in that manner before the destructor was built, and they recovered whenever they were able to live for a short while elsewhere.

Before dealing in detail and at length with these complaints and attempting to describe the problem at issue, it is only fair to give what may be called the official version of the question. In this the mayor, the chairman of the Destructor Committee, and the borough surveyor very courteously afforded me every facility. From the borough surveyor, notably, I was able to obtain the history of what had occurred. Thus, I was informed that up to the year 1895 the household and garden refuse used to be carted away to various "tips." The principal deposit or "tip" was just beyond the former borough boundaries at Windmill Hill. This is inland and to the north of the town. There was a secondary "tip" in a much more central position, close to the Torquay General Hospital and in the valley that divides the town in half. To the south-east and on the outskirts of the town there was another "tip" where the refuse was readily disposed of for use in the kitchen-gardens. Cartloads were sent to anyone who could utilise the refuse as manure for gardens. These persons had themselves to sort out the "hard core"—that is to say, the broken galley-pots, tins, and other hard substances, which they threw over the cliffs or on to any convenient waste land. As for the waste-paper, it was gathered together in a heap to await the dispersing effects of the next gale. There were also a number of smaller "tips" in different directions, and there is no knowing how long this very simple manner of dealing with a very complex problem might have continued but for the action of the Local Government Board. In 1895 this authority insisted that the Marychurch Urban District Council must build an isolation hospital. Thereupon a site was selected for the proposed fever hospital close to the main "tip" at Windmill Hill. It was then estimated that there were on this spot some 10,000 cartloads of decomposing town refuse. This was an immense heap and its proximity to a hospital could not be tolerated. Complaints were made also in regard to other, though minor, "tips" which were likewise in the Marychurch district. This raised a very nice point of law. Torquay is wedged in between two rural districts. Where was the refuse to be deposited if it was refused by these two districts? and had the fact that the "tips" had been sanctioned for many years established a right to continue using them? The refuse could not be left in the streets of the town. But the Marychurch authorities urged that they were prevented from building the hospital they had been ordered to construct. They called upon the Torquay Town Council to abate the nuisance, and they declared that the whole of the district round the main "tip" was inaccessible in consequence of the stench and the legions of rats that bred and flourished on the refuse depôt. These verbal protests were followed by an official notice which was served on the Torquay Town Council on May 11th, 1896. By that time the Torquay sanitary authorities had already ceased to take refuse to Windmill Hill; but they were now called upon to remove the great heap that had accumulated. Again, it was a moot question as to whether, after having allowed the depôt to be made, there existed any legal right to enforce its removal. This was indeed an embarrassing situation. Emissaries were despatched far and wide to persuade the farmers in the surrounding rural districts to come and to fetch the refuse away as manure. Here and there a farmer availed himself of this offer, but this help was very limited and insufficient. Fortunately there was close at hand a brickfield, and the owner offered to allow a claypit to be filled up with the refuse if it was subsequently covered over with two feet deep of earth. This was done and the Windmill Hill refuse-heap was completely removed, so that the difficulty with the Marychurch authorities was overcome.

At Torquay, however, the refuse continued to accumulate, and, if the mischief which had been done in the past had been remedied, there was no provision for the future. The "tips" that remained, especially the one in the valley near the Torquay General Hospital, were badly situated and altogether unsuitable, but no other and better sites could be obtained. Thereupon a series of ardent discussions were held by the Torquay Town Council which resulted in the conclusion that there was no other method of disposing of the refuse than by fire. Having thus agreed on the general principle it was almost as difficult to determine which of the many and rival destructors was best suited for the purpose in view. A travelling committee was therefore appointed to see what had been done elsewhere, and they went to Bournemouth, Southampton, Eastbourne, and to several Lancashire towns. These inquiries resulted in the preference being given to the new Warner high temperature destructor, and a scheme was devised forthwith for the building of a destructor on this system, with six cells or chambers. Then commenced the battle of the sites. 20 different sites were selected and proposed and it was most difficult to decide where the destructor should be put. All these matters had taken two years to debate. As the claypit by the brick-kilns was rapidly filling up something must be done. One by one the various sites proposed were eliminated and eventually a site was selected at Upton, in the direction of Windmill Hill but somewhat nearer to the town, and in October, 1896, the specifications were approved. The next month tenders were invited from two firms and elaborate schemes were sent in, but they were all too expensive. Then it was resolved to reduce the size of the destructor from six to four cells. Messrs. Goddard, Massey, and Warner undertook to build a destructor which would consume eight tons of refuse per 24 hours in each cell, or 32 tons in the four cells. As at that time only about 20 tons were collected in the course of a day this allowed a margin of 12 tons for the future extension of the town. For actual needs only three cells were necessary.

Having thus at last fully matured its scheme the Torquay Town Council now applied to the Local Government Board to sanction a loan of £6500 for the building of the destructor. In January, 1897, the Local Government Board sent Colonel A. G. Durnford, R.E., to hold a public inquiry previously to assenting to the loan. The town clerk then explained that, if properly worked, the destructor would cause no nuisance whatsoever. It was true that a memorial signed by 50 owners and occupiers objected to the site selected; but this did not mean much, for the majority of the signatories resided at a considerable distance from the proposed site. In the *Torquay Directory and South Devon*

Journal of Jan. 20th, 1897, a report is given of the Local Government Board inquiry, and this local paper states that :—

> So convinced was the council that no nuisance would arise that, subject to a clause in the contract, it had taken upon itself all responsibility. The clause provided that the contractors should be held answerable for the efficient working of the destructor for the first 12 months.

The borough surveyor, Mr. H. A. Garrett, is reported to have said that the chimney would be 150 feet high, and if the stokers did their work properly there would be no nuisance. He stated that there had not been a single complaint from the inhabitants of the houses situated close to the Bournemouth destructor. Mr. Warner supported this view by explaining that he had been connected with the erection of from 300 to 400 destructors. Then, alluding to the spot selected at Torquay, he is reported to have said that :—

> The site proposed was the most favourable one which he had ever seen and his firm was quite prepared to indemnify the council for 12 months. They had erected destructors immediately adjoining house property, but had never received complaints after erection, although there were many before. At Buxton the destructor was close beside a favourite walk, while at Hornsey it adjoined the works of the New River Water Company.

Mr. Warner added, when alluding to the apprehensions of neighbours, that he felt "convinced that there would be no cause whatever for complaint." Mr. Harris, however, who owned property at Upton, presented a memorial signed by 32 ratepayers protesting against the site selected, but the town clerk replied that there were 719 ratepayers in the district in question.

In the face of such evidence it is not surprising that the council should have entertained no apprehensions as to the unsuitability of the site proposed. Though it is, perhaps, easy to be wise after the event, still I must confess to great surprise in reading this evidence. It is considered necessary to build high chimneys to destructors; but what is the use of a high chimney if the destructor is placed at the bottom of a valley? Either the combustion is so perfect that a high chimney is not necessary; or, if it is necessary, then it ought to be considerably above the level of inhabited houses. But if a destructor is built at the bottom of a valley then the top of the chimney may be on the same level or even on a lower level than that of the houses erected on the surrounding hills. It seems only logical to conclude that if a lofty chimney has to be built so also should an elevated site be selected and there was such a site close to the valley that was chosen in preference. This is known as the Stantaway rock and is situated to the north-east of the Upton valley. There was also another elevated site to the north-west. But the objection was raised that if the destructor was built on the top of the hill it would be seen from all directions and would constitute an eyesore. As it is it must be confessed that the destructor has been very discreetly hidden and that it is more readily smelt than seen. The consideration which probably had the most weight in favour of the actual site is that it can be approached by six different roads. The refuse can be brought to this point in direct line from the various districts where it is collected; whereas, in the case of many of the other sites which were suggested it would have been necessary to cart some of the refuse through several districts before reaching the destructor. As for the two hills, there is but one road leading to the Stantaway rock and two roads to the other hill, and, of course, the drawing of the refuse up a hill would involve extra expense in cartage. Altogether, therefore, if it be a fact that destructors create no nuisance whatsoever, then doubtless the site selected was the most convenient available. Evidence was adduced to show that persons living close under destructor chimneys had not complained; but I would urge that what was wanted in this case was evidence to show that people could live on the same level as the top of the chimney without being inconvenienced. Such, however, were the reasons given for the selection of what appears to me to be a very unsuitable site.

The Local Government Board having given its assent to the loan the destructor was built and was ignited for the first time in September, 1898. At first, however, no refuse was destroyed. The object was to dry the brickwork and for this purpose only firewood was burnt. Yet, I was told, a week had not elapsed before a lady living in the Tor district wrote to the town council complaining that she was being poisoned by the refuse fumes. No refuse had been burnt, and, indeed, it was not till two months later that the full capacity of the furnaces as refuse destructors was put into action. This incident shows the power of suggestion, and this, no doubt, has played an important part in the complaints which have been made. At first there were, however, no further protests. But in the course of time a person who was building houses in the neighbourhood began to complain and soon many others followed suit. Complaints were even sent when the destructor was not in use. For instance, on one occasion new iron bars had to be put in the furnaces and for this purpose the fire had to be put out for a whole week. In spite of this complaints were made as usual. The fact is, that bad odours may arise from other causes. It was further pointed out to me that close to the destructor there are two tripe-boilers, a slaughter-house, and an iron-foundry with a blasting furnace that has not got a proper chimney. Then there are also four lime-kilns in the neighbourhood. But there are now a certain number of people whose minds are so impregnated with the destructor grievance that any odour which they may notice is at once put down to that one cause.

The complaints received by the town council did not flow in regularly. Sometimes they stopped altogether and this for as long as three months at a time. It cannot be said that the wind blows the fumes away from the town for so long a period. The worst time was undoubtedly during the summer. The refuse was then very light and there was not enough to keep the furnaces burning actively for the whole of the 24 hours. Therefore, from about midnight to eight o'clock on the next morning the destructor had to cease working. This intermittence caused the nuisance, for the combustion was imperfect while the temperature was being raised at the resumption of work. Also, it must be borne in mind that coals cost from 28*s.* to 30*s.* a ton at Torquay and therefore they are carefully economised. Every household has a cinder-sifter and there is consequently very little unburnt fuel in the ashes. In November, 1900, the boundaries of Torquay were extended to include the Marychurch and Chelston urban districts. This increased the population by 12,000 and consequently there is now enough refuse to keep the destructor going all night. But on Saturdays the work ceases at two o'clock P.M. and is not resumed till Monday mornings. The difficulty of raising the temperature which occurred every day has now only to be met on Monday mornings. Apart from this, if the attendants neglect the cells or allow them to get choked up and fail to extract the clinkers this may cause an unpleasant smell; and such carelessness happens more frequently at night time. As the greater number of complaints relate to odours occurring at night this shows that the complaints are not all imaginary, since so many of them mention the very time when it is recognised that a nuisance may be caused by mismanagement.

In regard to the nature of the refuse burnt it should not give rise to any special danger. The offal from the fish is not taken to the destructor; the greater part is used by the fishermen as bait for their lobster pots, and what little remains is buried with lime. Indeed, it is claimed that the refuse is exceptionally clean. According to the investigations made for the town council 12 per cent. of the refuse consists of paper and cardboard packing, 52 per cent. of garden and vegetable matter, 6·5 per cent. of screened cinders, 25·5 per cent. of fine ash and dust, and 3 per cent. of broken pots, pans, bottles, crockery—in fact, of "hard core." There is only 0·3596 per cent. of rags and bones, and the rest consists of bits of bricks, old iron, coal, coke, and the like. Garden prunings constitute the principal distinctive feature of the Torquay refuse. Consequently those who argue in favour of the destructor urge that there is nothing especially dangerous or offensive in such refuse and it is maintained that when a genuine nuisance is created it is not of long duration and is only due to the inefficient management of the furnaces or to the temporary interruption of the operations. When the furnaces have to be relighted then faggots and steam coal have to be employed, and this gives rise to the black smoke that has been complained about on several occasions. Yet the employment of this fuel must be continued till enough steam has been generated to move the engines that drive the fan for the forced draught. This inconvenience can now be considered as in a great measure set aside, for since the extension of the borough boundaries there is refuse enough to keep the furnaces going during six out of the seven days. In regard to inefficient clinkering this also, it is promised, will be more carefully superintended. Finally, it is pointed out that the nuisance cannot be very serious or there would not be such a rapid

increase in the building of new houses close to the destructor. Since the selection of the site for the destructor 100 cottages have been built within 400 yards and the St. James schools which are also close at hand have likewise been erected after the destructor. Consequently, it is maintained that the complaints are greatly exaggerated and sometimes purely imaginary, and that when they have been partially justified this has been due to the imperfect working of the destructor, and that imperfections of this nature can and will be rectified. Such, as far as I was able to ascertain, were the main arguments brought forward in defence of the destructor. These, however, represent but one side; it will now be necessary to consider what is said on the other side and to examine in detail the complaints made.

(To be continued.)

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

The Plague Epidemic: A General Increase.—Plague Vaccine.—The Reconstruction of Bangalore City.

THE last plague returns show 9198 deaths throughout India for the week ending Dec. 21st, as against 7795 in the week preceding, and 2267 in the corresponding week of last year. The principal figures are: Bombay districts, 5274 against 4735; Punjab, 1914 against 1685; Mysore State, 533 against 404; Madras districts, 324 against 233; Bengal, 327 against 291; and North-West Provinces and Oudh, 176 against 228. It will be seen that all the districts, with the exception of the last, return an increased mortality. Kashmir returns 361 deaths for the fortnight, and Bombay city reports on Dec. 31st for the previous week 180, an increase of five on the previous week. Calcutta also reports an increase, 28 deaths being returned for the week ending Dec. 28th as against 15 for the previous week. Since the general returns were published a further increase is reported from the Punjab, especially in the districts of Jullunder, Hoshiarpur, and Sialkot. A fresh province, the Nabha State, is now infected and returns 124 deaths. For some reason or other Poona city is left out, and yet we know from the local press that a large number of deaths are occurring in the city daily. Karachi had 54 deaths and Hyderabad State 55. A case of plague has been discovered in Madras city, which has up till now been free. These returns are very ominous, as the increase is general, and in several districts where plague raged last year a recrudescence seems imminent. About this time last year the disease developed in Calcutta, so that it is only to be expected that a decided increase will show itself shortly. Bombay city also shows signs of another recrudescence.

In the week ending Dec. 27th 40,081 doses of plague vaccine were sent out from the Research Laboratory in Bombay.

As the result of plague the city of Bangalore has been largely reconstructed. Of the 10,800 houses 1922 have been demolished. Five and a half miles of new streets have been made. The southern extension, chiefly to be occupied by Hindus, is laid out in the form of a rectangle with an open space in the middle of 22 acres which will be used as a public recreation ground, and the houses around run north and south and east and west in parallel lines. In addition there are reserved two other open spaces of six acres and nine acres in area respectively. This settlement is divided up into eight blocks, each block being reserved for members of a particular section of the community. The chief roads—viz., approach, boundary, and diagonal—will be 100 feet wide. The population will amount to 31·8 per acre. In the rear of each row of houses there will be a conservancy lane. It is reported by the superintending engineer that "for symmetry, regularity of street frontages, for accessibility by the shortest routes, for air spaces and for public squares, for convenience of conservancy and for perfect drainage they can only be equalled by some of the most recent cities of America." The northern settlement has been very similarly planned. The total cost to the State has been less than six lakhs and when all the sites have been sold the net cost will hardly exceed two lakhs. This is a splendid example for other Governments in India to follow.

Jan. 3rd.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Proposed University for Liverpool.

A DEPUTATION of governors and members of the Senate of University College, Liverpool, consisting of Sir John Brunner, Bart., M.P., Sir Alfred L. Jones, K.C.M.G., Mr. A. F. Warr, M.P., Principal A. W. W. Dale, Professor Rubert W. Boyce, Mr. E. K. Muspratt, Mr. W. E. Willink, and Mr. J. W. Alsop, waited upon the Lord Mayor on Jan. 13th and presented him with an influentially signed requisition to convene a meeting at an early date to consider the desirability of establishing a university within the city of Liverpool "for the advancement of knowledge and for the diffusion and extension of arts, sciences, and learning." Among the signatories to the requisition were the Earl of Derby, K.G., the Lord Bishop of Liverpool, and Mr. William Rathbone, formerly M.P. for Liverpool. The Lord Mayor has fixed Monday, Jan. 27th, for the meeting to consider the subject of the said requisition.

The David Lewis Northern Hospital.

At the annual meeting of the trustees of this hospital held on Jan. 15th the retirement of Mr. Chauncy Puzey, the senior honorary surgeon, was announced. Mr. Puzey retires in accordance with the law of the hospital regulating the term of office of the honorary medical staff. The chairman expressed the deep regret of the committee at Mr. Puzey's retirement, and in recognition of its high appreciation of his valuable and self-sacrificing services for the past 26 years recommended his election by the trustees as a member of the committee in addition to the post of honorary consulting surgeon. It is a pleasing fact to record, in view of the recent trouble at Macclesfield, that the relations between the committee and the medical staff of the David Lewis Northern Hospital have always partaken of the most cordial character. Among other matters of interest noticed by the chairman were the usefulness of the apparatus for the treatment of lupus, kindly provided by Mr. Benn W. Levy, which had been doing such excellent work that it had become necessary to instal a second lamp, for which Mr. Levy had made himself responsible, and he has kindly promised to bear the whole cost of working the apparatus for another year; also the amount of good effected by the horse ambulance, now in charge of the corporation, which had been called out 1016 times during the year. The ordinary expenditure had been £9543 as against £7956 in 1900. There was a balance of £4425 due to the bankers of the charity. The receipts from all sources had been £10,153, including £1943 from the ex-Lord Mayor's Hospital Century Fund and £1742 from the Hospital Saturday and Sunday Fund. 1801 patients were admitted to the hospital during the year 1901, whilst there had been 8954 out-patients, involving 26,540 attendances.

Malaria on the West Coast of Africa: Newly Discovered Parasite.

Sir Alfred L. Jones, K.C.M.G., the chairman of the Liverpool School of Tropical Medicine, has received from Major Ronald Ross, F.R.S., late I.M.S., who is directing the malaria expedition of the Liverpool School of Tropical Medicine which is now engaged in investigations on the West Coast of Africa, the following message: "I have great pleasure in informing you that Dr. Dutton has made a very important discovery at Bathurst. He has found a new kind of parasite which causes fever in human beings. The parasite is like the one which causes the fatal tsetse fly disease among horses in South Africa."

The Home for Epileptics at Maghull.

IN THE LANCET of June 29th, 1901, p. 1865, allusion was made to the generous offer of Sir Alfred L. Jones, K.C.M.G., to contribute the sum of £1000 towards the funds of the above institution, on condition that a further sum of £9000 be raised within six months from the date of his offer (June 22nd, 1901). The £10,000 were required to purchase and to equip a farm for the employment of male patients who had been trained to regular work at the "home." The six months expired on Dec. 22nd, 1901; and it has come out that £8175 have been promised. This amount is £825 short of the sum stipulated upon by Sir Alfred L. Jones, but, with his usual generosity, he has kindly consented to extend

the time limit to enable the committee to raise the balance. In the meantime the committee has acquired a most suitable property at Maghull, which contains, in addition to a farm-house and land, a modern residence which will be utilised as an additional home for female patients. There are now 70 male and 67 female patients in the three buildings of the "home," and many applicants are awaiting admission.

Liverpool Country Hospital for Chronic Diseases of Children.

The treasurer of the above-mentioned institution reports that the efforts made for the collection of subscriptions towards the erection of the new hospital have been greatly encouraged by the generosity of friends, £8333 having been promised in addition to the amounts previously announced.

The Proposed Leigh Infirmary.

The subscription list for the proposed Leigh Infirmary was opened last week and already over £8000 have been promised, including £2000 from the trustees of the Frances Charity, and £1000 each from the Leigh Coöperative Society, the Bedford Brewery, and the executors of the late Miss Farnworth. The Mayor of Leigh has subscribed £200. Lord Lilford has given three acres of land for building purposes.

The Liverpool Medical Institution.

Mr. Rushton Parker has been elected the President of the Liverpool Medical Institution. Mr. Rushton Parker is the professor of surgery in University College, Liverpool, and is one of the honorary surgeons to the Liverpool Royal Infirmary. He is also an examiner in surgery at the Victoria University.

Jan. 21st.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Scheme for a Psychiatric Clinique in connexion with the Edinburgh Royal Infirmary.

A WEEK ago a circular letter was addressed by Sir John Sibbald, M.D., late Commissioner in Lunacy, to a number of the leading physicians in Edinburgh and to a few prominent laymen, asking them to meet him at the Royal College of Physicians of Edinburgh to consider a proposal to establish a ward in the Royal Infirmary for the treatment of mental disorder in its early stages. The meeting was held on Jan. 21st in the afternoon. The chair was taken by Professor T. R. Fraser, President of the College, and there was a strong and representative attendance of hospital physicians and of asylum superintendents. A lord of session and several members of the board of management of the infirmary were also present. Professor Fraser, in intimating the reasons for calling the meeting, dwelt upon the fact that there were many cases of early mental disorder which called for careful and skilful treatment, such as could only be suitably provided in wards like those that the originators of the movement had in view. Sir John Sibbald was then called upon and he read a statement of his views. He dwelt upon the absence of provision for the hospital treatment of early cases of mental disturbance—the stage at which it was impossible to certify the person as insane, and therefore inadmissible to an ordinary asylum. At this stage it was of the greatest importance to the patient that he should be under careful medical treatment, and often of equal importance that he should be removed from his ordinary domestic environment. Many patients might by this means be saved from becoming hopelessly insane and ending their days in an asylum. Another class that would be benefited would be the cases of acute insanity of a temporary nature which could be successfully treated in the special wards of a general hospital without the stigma which was attached to even a short residence in an asylum as a certified lunatic. He referred at length to the system in vogue in Germany. He also dwelt upon the subject from the standpoint of its importance to the student who was to be a practitioner. The study of certified lunatics had become compulsory, but he thought that it was still more important to teach the student to recognise the early manifestations of disordered brain function and how to adopt suitable measures for the arrest of the condition at this stage. He held that the best possible arrangement was to have special wards for the reception and treatment of these cases in a general hospital, and this in Edinburgh meant the Royal Infirmary. Such wards would form the basis of a psychiatric clinique in connexion with the medical school and would be of great advantage to the student. Sir John Sibbald evidently thought that nervous cases other than mental ones might also be included, but this part of his statement was wanting in clearness. He was followed by Dr. Macpherson, one of the Commissioners in Lunacy, who supported Sir John Sibbald's proposals. Dr. T. S. Clouston referred to the teaching of psychiatry in Edinburgh; how it had commenced at the Morningside Asylum, where the university instituted a lectureship in insanity and where now the course was compulsory. He entirely approved of hospital wards for the early cases and the establishment of a hospital clinique, and he suggested that an arrangement might be made between the infirmary and the county council whereby certain early and acute cases might in the first place pass through a special ward in the infirmary. After some further remarks a committee was appointed to consider the matter in detail.

The Morison Lectures.

These lectures are delivered this year by Dr. G. A. Gibson in the Royal College of Physicians of Edinburgh. The subject chosen by the lecturer is "The Nervous Affections of the Heart." The first lecture was delivered on Jan. 20th, before a good audience. The part of the subject dealt with was "The Clinical Features of Sensory Disturbances." The three lectures of the present session he intended to devote to sensory affections. He dealt with the history of his subject, showing that the modern scientific aspect had its first formal presentation by Heberden in 1768, but that Edward Jenner and John Hunter had associated heart pain with changes in the nutrient arteries of the heart. He next proceeded to describe the general features of painful disorders of the heart, showing that the different symptoms were accompanied by objective phenomena, such as skin tenderness in the area of pain; and discussing alterations in the movements and sound of the heart, in the pulse, in the respiratory movements, and so forth. He then considered classification, condemning the division into true and false, but adhering to two groups, organic and inorganic. In the former were placed all the varieties depending upon obvious changes in the heart and great vessels within the chest, while in the latter were placed all those in which there were no definite structural changes, including toxic and neurotic.

Memorial to the late Professor Henry Alleyne Nicholson.

A movement has been initiated with the view of commemorating the late Professor Nicholson by the erection of a bronze tablet in the museum at Marischal College. Professor J. Arthur Thomson, Zoological Department, Aberdeen University, and Mr. John E. Marr, F.R.S., lecturer in geology in Cambridge University, have undertaken the preliminary steps and are prepared to receive subscriptions from "those who were friends, colleagues, collaborateurs or old students. It has been suggested that the memorial should take the form of a simple bronze tablet with an appropriate freize, including, for instance, symbolic representation of some graptolites and tabulate corals. We are convinced that the fittest memorial of our friend should be simple and spontaneous, and we invite suggestions if you are disposed to assist in the commemoration." The proposal has already met with warm approval, and it is hoped that those who had the honour and the pleasure of being instructed by one who has shed such lustre on the University of Aberdeen will send in their subscriptions to either of the honorary secretaries as soon as possible. It has been suggested that should funds be sufficient a Nicholson prize in zoology might be instituted.

Aberdeen University "At Home."

The Aberdeen University Association of Lecturers and Assistants gave an "At Home" at Marischal College on Jan. 18th. The guests numbered about 200.

Aberdeen Students' Representative Council.

At a meeting of the above council at Marischal College on Jan. 18th it was decided unanimously to give the sum of five guineas from the funds to the students' fund in connexion with the University extension scheme. This fund now amounts to £250. The council agreed to become patrons of the bazaar of the University Athletic Association to be held in October, 1902, for the purpose of aiding the funds of the association. Delegates to the Scottish Inter-University Conference in Glasgow were appointed.

Jan. 21st.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Legal Fees of Expert Medical Witnesses in Ireland.

IT will be remembered that an important decision in reference to the fees of medical men as witnesses in legal actions in Ireland was noted in THE LANCET some months ago. It was contained in the judgment of Mr. Justice Kenny, with whom Mr. Justice Barton and Mr. Justice Wright concurred, and it was to the effect that the fees for professional witnesses residing within five miles of Dublin were fixed by the schedule at one guinea a day for attendance in court unless in the opinion of the taxing master the case was exceptional and that, moreover, there was nothing exceptional in the particular case—an action against the Great Northern Railway Company of Ireland for damages for personal injuries in which the plaintiff was awarded £450. Mr. Justice Kenny held the opinion that the court was bound by the schedule and by the decision of the Master of the Rolls in Maconchy *v.* the Bank of New Zealand. He said that the taxing master was bound by the schedule not to allow more than one guinea a day to the medical men of Dublin, even to those of exceptional eminence. The fees were accordingly reduced to the schedule allowance and the plaintiff gave notice of appeal. On Jan. 13th the case came before the Court of Appeal—Lord Justice Fitzgibbon, Lord Justice Walker, and Lord Justice Holmes. The most eminent members of the Irish bar were engaged. In the course of the argument it was stated that the taxing master had until quite recently made use of what was supposed to be his legal discretional power and, in fact, had allowed five guineas a day to medical men of eminence in Dublin for their attendance in court. He was examined and he is reported to have said that the case was in his opinion exceptional, because it had lasted for three days and had been adjourned over one day. Lord Justice Fitzgibbon, in giving judgment, said that on the questions put to the taxing master and the answers given they were not justified in making this an exceptional case or to increase the allowance under the scale. It was, he said, almost impossible to lay down a hard-and-fast rule as to what was an exceptional case, but he was clearly of opinion that there were no exceptional circumstances in this case, and that the taxing master should not have exceeded the scale in his allowance. Lord Justice Walker with Lord Justice Holmes concurred, and the appeal was accordingly dismissed. The effect of this decision, by which the discretionary powers of the taxing master in Ireland as regards legal fees to medical witnesses are so circumscribed, is of much importance. It is difficult to see in what direction it may trend. Medical men of position in Dublin will certainly refuse to help the courts of law and to give evidence under the reduced schedule of legal fees. Their fees must therefore in future be guaranteed to them beforehand by the litigant who requests them to give evidence. That, *primâ facie*, seems objectionable. It seems unfortunate that the law in England as regards many small but important matters fails to stretch over to us.

Royal College of Science for Ireland.

Early last year a committee appointed by the Government recommended that the buildings in St. Stephen's-green, known as the Royal College of Science for Ireland, should cease to be used for science, and that the present Science and Art Museum, with a frontage in Kildare-street and another in Merrion-square, should be extended in order to embrace the work of the Royal College of Science and also that of the new and important Department of Agriculture. For that object the Government has now determined to buy almost the whole west side of Upper Merrion-street, which is virtually an extension of Merrion-square West. It has been definitely decided to purchase the 13 mansions and houses extending up Merrion-street from the Government Museum Department in Merrion-square. The frontage is over 100 yards, and as the houses, gardens, and stables in Upper Merrion-street extend back for nearly 100 yards (288 feet) the Board of Works will thus acquire an area of about 100 yards square in the very best part of Dublin. The local papers have not noticed the matter and are probably unaware of its importance. From the medical point of view it is not devoid of interest, for Upper Merrion-street is only second to Merrion-square North as a favourite habitat for the medical profession of Dublin. They are almost all owners of long leases of the houses which they occupy. They have recently received notice from the Board of Works that application is intended to be made to Parliament in the ensuing session for an Act to acquire by compulsory purchase or otherwise the lands, houses, buildings, and premises in Merrion-street. The medical men who live along the northern side of Upper Merrion-street must therefore soon look out for houses elsewhere.

Coleraine Cottage Hospital.

At the annual meeting of the subscribers held in the town hall, Coleraine, on Jan. 15th, it was reported that 71 cases had been treated during the year, and that 27 operations had been performed, all of which had been successful. The ordinary expenditure for the year was £444 3*s.*, and the ordinary income £444 2*s.* 10*d.*, of which the patients paid £105 2*s.* 6*d.* The other sources of income were chiefly subscriptions, donations, and church collections.

The Fund for the Family of the late Mr. W. Smyth.

At a meeting of the Belfast committee of this fund held on Jan. 17th the report of the audited accounts showed that the Belfast subscriptions were (after paying the necessary expenses) £1328 6*s.* 11*d.* Since this audit further subscriptions of £21 19*s.* have been received and the Belfast Banking Company are kindly allowing interest on current balances. As the result of letters to the London press by "A Hospital Nurse" nearly £600 have been collected by Mrs. Henry Arthur Jones, of Portland-place, London, and this amount is to be amalgamated with the Belfast fund, making nearly £2000 in all. It is understood that the total of the combined fund raised for the family of the late Mr. Smyth will be £6000. The money is to be invested in a board of trustees as follows: the Duke of Abercorn, Mr. John Herdman, D.L., Mr. H. T. A. Warnock (Donegal), and the President of the Royal College of Surgeons in Ireland. Special votes of thanks were passed to the press, to Dr. W. H. Allen (Stanmore, Middlesex), to Miss Russell Geddis (the "Hospital Nurse" who originally wrote the letters to the *Standard*), to Mrs. H. A. Jones, and to all who had so kindly assisted the fund by collecting.

Lamentable Disaster in Belfast.

Belfast was on Jan. 20th plunged into the deepest sorrow and mourning by a terrible accident which occurred in one of the large flax-spinning and weaving mills. About 9.30 in the morning a portion of the outer wall on the east side of the building gave way (due probably to a fracture of one of the cast-iron beams which rest on the brick piers through what is known as crystallisation in the iron), with the result that the heavy machinery was precipitated through the five storeys of the mill to the basement, carrying down many unfortunate workers and burying several under the débris. As a result of this most awful calamity—the most terrible which has ever occurred in the industrial history of Belfast—13 people have been killed and 12 patients—some very seriously injured—are lying at the Royal Victoria Hospital, Belfast. A rescue party, consisting of mill-workers, firemen, police, members of the salvage corps, and medical men, set to work to remove the débris, which consisted of several hundred tons of broken bricks, cement, and stonework, intermingled with iron beams and twisted and damaged pieces of machinery. A terrible scene was presented to the onlooker, while the noise was appalling owing to the cries of the terrified workers who had escaped, mingled with the groans and shrieks of those who had been partially engulfed. The task of clearing the fallen material was almost superhuman, the difficulty being due to the huge masses of heavy iron and steel machinery, but as the result of continued effort throughout the whole day and night, relays of workers being employed often at great personal risk, the work was accomplished, and one by one the unfortunate victims were rescued and conveyed in the fire brigade ambulances (of which three were constantly employed) to the Royal Victoria Hospital, where the most perfect and ample arrangements were made for their reception and treatment. The great feature of the cases, from a medical point of view, was the extreme shock. Simple and compound fractures of the limbs, severe head and pelvic injuries, and cases of damage to internal organs were among those admitted. The newspapers all speak in terms of the very highest praise of the splendid work of the rescue party, of the ambulance arrangements, of the devotion of the medical men who gave their services at the scene of the disaster, and of the thorough attention and care given to the unfortunate sufferers at the Royal Victoria Hospital.

Jan. 21st.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Ship Surgeons and Shipping Companies.

A SPECIAL diploma for ship surgeons (*diplôme de médecins sanitaires maritimes*) was introduced some years ago. Provided with this qualification a medical man could fulfil the duties of surgeon on board a merchant vessel or transport, but the new diploma left him in the position of a mere servant of the shipping companies, although his duties included the carrying out of sanitary measures. It has often been suggested that ship surgeons should have the status of Government officials, but no steps have been taken in this direction, and men whose duty it is to act in the interest of public health remain the paid servants of employers upon the adequacy of whose arrangements they may have to express an opinion. Under these conditions disputes were inevitable. The ship surgeons founded a society and believed that in it they had a right to discuss questions of hygiene and to criticise the measures adopted by the companies for the prevention of disease. These measures are not so good as they might be, the fact being that the shipping companies, although in receipt of considerable bonuses from the Government, trouble themselves very little about the welfare of their passengers, as has been recently shown in the case of the *Senegal*. The criticisms uttered in the society of ship surgeons gave offence and the president of the society has been discharged by the company in whose service he was. Painful examples are not wanting of the scanty consideration entertained by the shipping companies for the surgeons on board their vessels. A surgeon became seriously ill while passing through the Red Sea and arrived at Marseilles in a delirious condition. The company who employed him set him on shore, refusing to have anything more to do with him, and the police commissary of the Quartier de la Jolette had to order an ambulance and to procure his admission into one of the general wards of the Hôpital de la Conception. Under these circumstances the only advice that can be given to the ship surgeons is that they should form an association and should bring the shipping companies to understand, even by means of a strike if necessary, that they are entitled to better treatment.

Diphtheria in Paris.

Diphtheria being increasingly prevalent in Paris, the Municipal Health Committee at its last meeting discussed the sick- and death-rates occasioned by this disease in Paris last year. The committee recommended that copies of the official instructions relative to diphtheria should be sent to the families who have children absent from school from this cause; that these instructions should also be sent to the medical men of the districts in question; that local health committees and medical societies should be asked to discuss the prophylaxis of diphtheria at their meetings; that the committee on insanitary dwellings should be informed of the addresses at which cases occur; and that public and private schools should be medically inspected.

Infant Feeding and Infant Mortality.

The Academy of Medicine, on Jan. 14th, acquiesced in the conclusions presented to it in a report made by M. Porak at the instance of the Committee upon the Hygiene of Infancy. The conclusions were brief and succinct. The milk of the mother, or, failing the mother of some other nursing woman, is the best method of feeding the infant. If human milk cannot be obtained, animal milk—cow's, goat's, or ass's milk—ought to be given. Feeding-bottles with tubes ought to be interdicted by law, as being responsible for great infant mortality. M. Porak refers to a report of the Academy stating that only children nursed *à domicile* are submitted to the legal inspection provided under the Roussel Act, and proposes to open an inquiry into the working of this Act which he considers unsatisfactory and partial. The Academy has decided that the control of home-nursing ought to be more thorough. As the possible causes of death to the infant are most numerous during the first month of life the Academy recommends that the visits of the *médecin inspecteur* should be weekly during that period, fortnightly for the next four months, and monthly during the sixth and seventh months. Lastly, to obviate one of the reasons, trifling in appearance but really of the first importance, preventing nursing women from applying whenever necessary to the *médecin inspecteur*, the Academy suggests that such women should be admitted to the benefits of the Assistance Médicale, and that foster-mothers should have legal help in any process against the parents for the recovery of their wages.

Parasites in the Blood of Epileptic Patients.

M. Bra has taken specimens of blood from the veins of the forearms of 70 epileptic patients under the care of M. Magnan in the Hospital of St. Anne, and also under the care of M. Marandon de Montyel at the Asylum of Ville-Evrard. All these patients were suffering from the form of epilepsy which is called idiopathic, and M. Bra has been able at certain periods of the affection to demonstrate the unvarying presence of a micro-organism. During the lengthened period which intervened between the paroxysms, examination very often gave a negative result, but when the blood was examined just before the attack, or during or immediately after an epileptic crisis, small, feebly refracting points could be seen in the plasma. They were 1μ and under in length, and were seen either alone or as diplococci. They moved very rapidly sometimes, either singly or united together in greater or less numbers, and while thus united they presented the appearance of little worms of a length equal or superior to the diameter of a red blood corpuscle. Generally, six or eight of these bodies were seen together. They presented various forms, but the most typical was that of a chain terminated at each extremity by a larger body somewhat resembling a chain-shot. They moved about with serpentine movements and tumbled the one over the other. Very often they became rolled up into balls, so that it was impossible to be certain of their real form, and sometimes they were seen adhering by one extremity to a red blood corpuscle. Apparently they are some form of streptococcus which, owing to its morphological and biological characters, constitutes a very special variety, and one which M. Bra has never found except in epileptics.

The Consumption of Various Drugs by the Paris Hospitals.

Médecine Moderne has got together some remarkable extracts from a report presented to the Municipal Council by M. Houdé upon the Central Hospital Dispensary. Here are some of the figures for 1901: The total expenses were 1,981,820 francs, of which 142,420 francs went for general expenses, being an increase of nearly 500,000 francs over the figures for 1890. Passing on to expenses for drugs properly so-called, in 1899 81,000 francs were expended in drugs, as against 34,000 in 1890, and another 80,000 francs for vegetable drugs (*herboristerie*), as against 44,000 francs in 1890. Various chemicals cost 321,000 francs, as against 220,000 francs. The quantity of coffee remains almost the same, that is to say, 39,000 francs as against 38,000 francs, but the consumption of sugar has gone up very remarkably—viz., 216,000 francs, as against 157,000 in 1890. Leeches are a small item. There were only 250 francs worth used in 1899 and 224 in 1890. The consumption of glycerine has, however, increased very much, the figures being 79,000 francs, as against 43,000. 63,000 kilogrammes were used at the various hospitals, and of this total the Lariboisière Hospital alone used 7621 kilogrammes, or as much as the Hôtel Dieu and the St. Louis Hospital together. It is a remarkable thing that no enemata are given at this hospital, but it seems to be particularly profuse in the use of medicines. The total consumption of iodine at the various hospitals was 11 kilogrammes, and of this quantity the Lariboisière Hospital used 60 per cent., and out of a total quantity of 5625 grammes of tincture of musk 3060 grammes, or 54 per cent., were used by the Lariboisière Hospital. The report is in utter despair about the consumption of alcohol. In 1890 pure alcohol cost 86,000 francs. In 1899 the expenses had gone up to 219,723 francs. As regards rum, the expense is almost doubled, and again the Lariboisière Hospital comes out at the top. The total quantity of rum for the various hospitals amounted to 35,527 litres, and of this quantity the Lariboisière Hospital took 6428 litres. As a rule, the rum is used up in making "Todd's drink" and "*thé au rhum*." The report considers that 36,000 litres of camphorated alcohol, which has apparently been used, has not been employed in a proper manner. This preparation, it appears, is not only used in the hospitals to rub patients with, but it is used very extensively for cleaning windows. Camphorated alcohol appears to be an admirable thing to add to whitening. When windows are cleaned with this mixture the alcohol evaporates and the camphor which is left behind seems to have a wonderful effect in making the glass highly polished and bright.

Jan. 21st.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Accident to Professor Virchow.

PROFESSOR VIRCHOW, whose eightieth birthday was the occasion of great celebrations a few months ago, has unfortunately met with an accident which may possibly have serious consequences. While travelling in an electric tramcar he jumped off before the car had completely stopped and fell on the asphalte roadway. After being carried home he was attended by Professor Körte who discovered a fracture of the femur. This unfortunate occurrence has evoked great sympathy in every class of the population. The Emperor sent a representative to Professor Virchow's residence to inquire as to the condition of the distinguished patient, and many public bodies and associations—political and non-political—did likewise. The Berlin Medical Society when appointing officers for the current year at the first meeting in January unanimously re-elected Professor Virchow as president, and sent him a telegram of sympathy.

Dues payable to the Medical Chambers.

A recent law requires the qualified medical men of a district to pay every year to the treasurer of the medical chamber of the district a sum proportionate to their incomes. The money is used for the expenses of the chamber and for a fund to support distressed members of the profession. At the last meeting of the Berlin Medical Chamber a petition was read on behalf of a certain number of professors, *privat-docents*, assistants, &c., who although duly qualified are not engaged in medical practice and some of whom have never practised. These medical men hold appointments in the physiological, pathological, anatomical, and other scientific departments of the university, or in the municipal hospitals. They pointed out that being exclusively occupied with scientific questions they were not in the least concerned with the topics bearing on the interests of medical practice which were exclusively discussed and decided in the Medical Chamber; their position differed entirely from that of the medical practitioner, and the medical chamber had never given any attention to their special interests. In the discussion which ensued Professor von Bergmann said that the petition was altogether ill-advised; that theoretical medicine must always have a connexion with medical practice, and that the representatives of the former should never forget that they had a good deal to do with practical medicine as members of examining boards and in other capacities. The petition was unanimously rejected; it was then stated that the petitioners had always paid their contributions to the medical chambers without any objection, and that they had even used their right to vote at the elections for the chamber. At the same meeting the chamber agreed to a motion that it was desirable when plague was prevalent in a district to cremate the bodies of the deceased instead of burying them.

Jan. 20th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Mental Soundness of Eddyites.

THE Surrogate's Court of New York County holds in *re* Brush's will that, however the teachings of "Christian Science" may be opposed to the beliefs and notions of many, being founded on the religious conviction of those professing them, the court cannot say that those persons holding them are mentally unsound, as the truth or falsity of a religious belief is beyond the scope of judicial inquiry. The court also says that it has often been urged to pass an opinion upon the falsity of spiritualism and to hold that a follower of that faith, like Eddyism, as holding beliefs contrary to those of most men, was of necessity labouring under an insane delusion, but that it has uniformly refused to declare or to hold this opinion. The question for the court to decide in determining the testamentary capacity of a "Christian Scientist" is as to the effect of the belief upon his or her mind, the belief itself not being an evidence of insanity. The question which arises is whether this belief has displaced judgment, dethroned reason, and so made the person incapable of making a will. If the effect of this belief has been to fill the mind with insane delusions resulting in the testator's will then the document must certainly be set aside. In the case before the court it was decided that the testator was of sound mind.

The Liability of Physicians in Local-Option Territory.

The Court of Criminal Appeals of Texas says in McLain *v.* the State that the legislature, as it holds that it had a right to do, has decided that for medicinal purposes intoxicants can only be sold upon a prescription certifying that a regular physician signing the prescription has personally examined the party to whom the prescription is given and that he is actually sick, and that that physician must testify to this upon his honour. These are the requisitions of the legislature. There is no kind of prescription authorising the sale except that provided by the statute, and even that is no prescription until the law has been complied with. In the event of a sale an illegal prescription is no protection to the seller or to the physician, because in that case the latter makes himself a party to the sale by giving an illegal prescription by means of which the law is evaded. As in misdemeanours all are principals, so an illegal prescription given by a physician involves him equally with the seller; both are liable, for each is required to know the law; and to bring about the sale each is obliged to comply with the requirements of the law, and failing in this one is as liable as the other for the punishment ordered for illegal sales. The court further states that it is not now dealing with a physician who gives a false certificate though in the exact terms of the law. In this particular case the court holds that a prescription was properly excluded because it was not in conformity with law, as it had omitted the expression "personally examined" and the certificate upon honour required by the statute.

A Year's Immigration.

The annual report of Commissioner Powderly of the Immigration Bureau shows the total steerage arrivals in the United States in the year to have been 487,918, an increase over the preceding year of 39,346, or approximately 9 per cent. Of this increase 2020 came from Canadian ports and the remainder through United States ports. There were also 74,950 other alien passengers who came as cabin passengers, making a total for the year of 562,868. The ratio of increase of Italian immigrants as compared with that of last year from that country is approximately 36 per cent., or more than threefold the ratio of increase from all Europe, and the increase numerically from all other countries of Europe aggregates scarcely one-fourth of that from Italy. The total steerage immigration was distributed as to sex between 331,055 males and 156,863 females, and as to age between 62,562 under 14 years, 396,516 from 14 to 45 years, and 28,840 over 45 years. It is shown that 117,587 were unable to read or write, 3058 could read but not write, and that 294,860 brought each less than $30, and 56,312 had more than $30 each. During the past year 363 persons have been returned to their respective countries, having become public charges within one year after landing. The number not allowed to land was 3516, against 4246 last year. The report shows that the character of the immigrants was decidedly superior to that of last year, the rejections being 730 less though the arrivals were 39,346 more. The principal countries from which the steerage arrivals come are as follows: Italy, Sicily, and Sardinia, 135,996; Austria-Hungary, 113,390; the Russian Empire and Finland, 85,275; Ireland, 30,651; Sweden, 23,331; the German Empire, 21,561; Norway, 12,248; and England, 12,414. In discussing the general subject of immigration the Commissioner-General says that to deal with the problem successfully it seems indispensable to remove as far as possible those conditions which conflict with the incorporation of the alien element into the social system of America, in order that by actual experience the former may learn as soon as possible that the basis and foundation of the American polity are a respect and affection for, and a willing obedience to, the laws and customs of the land, because the maintenance of these laws is the best safeguard of personal liberty. It is therefore recommended that Congress should enact suitable legislation, either with, or if necessary without, the coöperation of the States, for the purpose of distributing the alien population with some reference to the industrial law of supply and demand.

An Appeal from the Ruling which Bars out Consumptives.

An assistant-secretary of the Treasury Department will

appeal from the ruling of the Marine Hospital Service published last spring which placed tuberculosis among the infectious and loathsome diseases which are barred out from admission into the United States under the existing immigration laws. A circular letter was recently sent to the immigration commissioners at all the American ports for special reports as to the number of aliens affected with consumption who had arrived since July. An examination of the official replies revealed to the authorities that less than 50 immigrants had been debarred from admission on account of tuberculosis. At the port of New York only 34 cases had been reported, at Baltimore two, and at Philadelphia three. Of these latter one young woman died before she could be deported. It is understood that the assistant-secretary has come to the conclusion that the number of immigrants coming to this country with tuberculosis is not sufficient to require other than the exercise of the powers of the city board of health to guard against its spread and to care for the afflicted. He argues that if other nations desired to adopt retaliatory methods, with regard to which there has been some discussion, the United States would be a great sufferer.

Dinner to Dr. T. Gaillard Thomas.

A banquet was given recently to Dr. T. Gaillard Thomas by his medical brethren, the occasion being the anniversary of his seventieth birthday. The dinner in his honour took place at Sherry's Restaurant, and was attended by nearly 300 members of the New York medical profession with the addition of a few from other cities. Dr. James W. McLane of the College of Physicians and Surgeons presided. Among the speakers were Dr. Weir Mitchell of Philadelphia, Judge Howland, Dr. William Welch of Johns Hopkins University, and Dr. Shattuck of Boston. A eulogistic sketch of Dr. Thomas's career was given by the President of the New York College of Physicians and Surgeons at which school Dr. Thomas had passed a portion of his life as a teacher of medicine. Dr. Thomas himself, who is known as one of the best orators in the American medical profession, made a speech which well upheld his reputation. Dr. Thomas is a native of South Carolina; he studied first at Bellevue Hospital School, after which he took courses in midwifery at the Rotunda Hospital, Dublin, and then spent some time in Paris, finally settling in New York. From 1855 to 1860 he was a lecturer on obstetrics at New York University, but after the Civil War the College of Physicians and Surgeons prevailed upon him to join its teaching faculty. Dr. Thomas's specialty has been the diseases of women, in which he has made himself a world-wide fame; he is the author of a standard treatise on that subject.

Tetanus in St. Louis.

A commission which was appointed to investigate the tetanus poisoning in St. Louis subsequently to the use of antitoxin prepared by the Board of Health has reported that the diphtheria antitoxin so prepared was issued before it was possible to have obtained results from the usual necessary tests; and that had these tests been made the animal experiments would have proved the presence of tetanus germs and that the fatalities would have been avoided. The disastrous occurrences in St. Louis have given rise not unnaturally to a considerable amount of animus against the practice of boards of health manufacturing and distributing antitoxins. It is pointed out that antitoxic serums supplied by private manufacturers are prepared in almost all instances by trained bacteriologists who know the technique necessary to protect the serum from contamination, so that it is almost impossible that any serious impurities should gain an entrance into it. It would seem from the accident in St. Louis that marked carelessness prevailed both in the manufacture of the serum and in its distribution. The antitoxin which caused so many deaths in St. Louis was prepared at a municipal laboratory conducted upon an economical basis, not in a commercial laboratory run upon strictly business principles. In institutions of the former class politics are liable to enter and the help is rather likely to be chosen from among political favourites than from among those who are especially adapted for the work in question. The moral of the unfortunate events at St. Louis would seem to be that work of such scientific accuracy should be placed in the hands of those who can afford to engage the best possible assistance and who are able to choose their men entirely irrespectively of any outside influence or coercion.

Jan. 7th

NEW ZEALAND.

(FROM OUR OWN CORRESPONDENT.)

The Public Health Department.

THE first report of the Public Health Department, which was presented to Parliament by the Minister of Public Health last month, naturally contains a good deal that is interesting generally, as well as much that is instructive. Dr. J. Mason—the chief health officer—prefaces his report with the statement that the Public Health Act of 1900 puts this colony in the van as regards the conservation of the public health. He indicates briefly what has been already done and the plans for the future. The colony has been apportioned into six divisions of much the same area and description as the old provincial districts. Each district will be under the charge of a district health officer, who must be a qualified medical practitioner and possess a special qualification in public health or sanitary science, or have special knowledge of sanitary and bacteriological work. He will be required, among other things, to inform himself as far as practicable respecting all influences affecting, or threatening to affect, injuriously the public health within the district; to inquire into and to ascertain the causes, origin, and distribution of diseases within the district and to ascertain to what extent they depend on conditions capable of removal or mitigation; to keep himself informed of the conditions injurious to health existing in the district; to be prepared to advise the various local bodies on all matters affecting the health of the district and on all sanitary points involved in the framing and subsequent working of such by-laws and regulations as they may have power to make; and to direct or superintend the work of inspectors of nuisances within his district. Under this system it is fairly expected that ere long many, if not all, of the conditions which militate against the health and well-being of the community will be removed. The precautions adopted against the occurrence of plague in the colony are outlined. Special regulations have been drawn up for the guidance of all who have to deal with cases of dangerous infectious diseases, providing for the isolation of persons, disinfection of persons and things, disposal of the dead, &c. "Our danger," Dr. Mason states, "lies not so much in the landing on our shores of a case of plague, but in the thousand-and-one insanitary conditions which exist all over the colony—conditions which make for the depreciation of the individual's power of resistance to disease, and at the same time form a happy hunting-ground for that most energetic of colonisers—the rat. Not from plague have we most to fear. Let but one case of small-pox escape the grasp of the inspecting officer, and within a few months there will be raised to that reaper who plies his sickle without note of season, a harvest before which the number of victims of plague would pale in insignificance. The responsibilities of the opponents of vaccination are great and 'conscientious objectors' are many, but it will be found if ever that scourge comes amongst us that assuredly the one will not be allowed to forget what he has sown though the other may disappear." Dr. Mason deplores the pollution of our rivers and streams by sewage and by refuse from factories and devotes some space to urging the importance of proper drainage of our towns. As regards the effect of the new drainage system in Wellington he says: "Previous to the completion of the present sewage system enteric fever used to occupy a not insignificant position both in the hospital records as well as the death-rate. At the present time, even although the house connexions are far from complete, this disease, which is one of the best barometers, so to speak, as to the sanitary condition of a community, has in a great measure disappeared." A phase of the meat-supply question is thus dealt with: "Were the retailers of any other article of diet to expose their wares in the way in which the butchers, large as well as small, do, there would be at once a great outcry. Take any of the best shops that we see in our large towns. The meat is exposed to every wind which blows, and to every particle of dust which is carried by that wind. There is no question whatever that disease can be carried and spread in that way. To remedy this should not be a difficult problem. The meat could be inclosed between two layers of glass, which space could be properly aerated by means of a

fan. The meat would in this way be protected completely from contamination by the hundred-and-one forms of filth which are blown about in every large town, while the appeal to the customer's eye would still be as strong as it is now, and far more pleasing would be his reflections." Dr. Mason also indicts the system under which milk is supplied to the consumer. He says: "There is, unfortunately, not the slightest room for questioning the truth of many of the statements which have been made in reference to dirty milk. It cannot be otherwise when one considers the slipshod methods in use by the retailer as well as by the buyer of the milk. It would be unfair to a great number of milk-vendors to say that all are dirty, but the fact remains that not a few of them take little or no trouble to profess the virtue of cleanliness, even if they have it. The cans are not bright, the carts are often dirty, and the clothing of the dispenser not infrequently shows unmistakeable evidence of a rubbing acquaintance with cows and cow-bails. Then again the customer aids and abets the vendor by providing an open vessel like a jug to receive the dust and dirt as well as the milk. It seems marvellous that no company has seen its way to undertake the retailing of milk in the tasteful, cleanly way in which one sees it done on the continent and in some parts of London—bright clean carts, clean polished pans, Pasteurised milk from guaranteed herds, and, above all, clean, tidy servants, dressed in spotless linen—and success, I feel sure, would be attained." The report deals exhaustively with the question of phthisis, and concludes with a reference to the educative work in sanitary matters carried on by Dr. Pomare, native health officer, among the Maori population.

Dec. 18th, 1901.

Obituary.

WILLIAM NASH, M.D. EDIN., M.R.C.S. ENG.,

SURGEON-GENERAL, A.M.S. (RETIRED).

ON the early morning of Jan. 19th Surgeon-General W. Nash unfortunately succumbed to pneumonia (the result of a chill caught during the previous week) to the deep sorrow of his numerous friends, and these will include all who have ever had the honour of his acquaintance, for no officer possessed in a greater degree the innate quality of attracting the affection of his equals and subordinates. He was educated at King's College Hospital and at Edinburgh University, and on entering the army was in the 72nd Seaforth Highlanders. He served for 36 years in the medical service of the army. His war services included the Kurram campaign under Lord, then Sir Frederick, Roberts, where he was present at the battle of the Peiwar and the occupation of the Shuturgurdan (despatches, medal, and clasp), and the Egyptian campaign under Viscount Wolseley (medal and bronze star). His last office was that of principal medical officer of Netley, during which time he twice had the honour of receiving her late Majesty at the hospital. During his whole career Surgeon-General Nash's qualities were such as to make him beloved by all officers and men who came into contact with him. Ever ready to help any brother officers, he yet knew how to exercise firm discipline when necessary.

WILLIAM SMITH LUNAN, M.B., C.M. ABERD.

INTIMATION was received early this week of the death, on Dec. 27th last, of Dr. William Smith Lunan, son of Mr. William Lunan, C.A., Aberdeen. Deceased was a native of Aberdeen and studied at Marischal College, where he graduated M.B., C.M. He then proceeded to Fort Beaufort, South Africa, and entered into partnership there with Dr. Pearson. He subsequently acted as a surgeon in the Matabele War and was surgeon-captain in the British South African Police. About a year ago he transferred his services to the Globe and Phœnix Mine, Rhodesia, which post he occupied at the time of his death. Dr. Lunan was about 40 years of age. He married Miss Quin whose father was a member of the Cape Parliament. His family numbers four. In Aberdeen the news of his death has been received with much regret.

WALTER LAWRANCE, M.R.C.S. ENG.,

FLEET SURGEON, R.N.

A WIDE circle of friends will hear with deep regret the news of the death of Fleet-Surgeon Walter Lawrance, R.N. (retired), which took place on Saturday, Jan. 18th, at his residence, 5, East Craibstone-street, Aberdeen. A native of Aberdeen, Fleet-Surgeon Lawrance was educated at the Grammar School and Marischal College. He entered the Royal Navy in October, 1841, and was made surgeon in 1852. Two years later he was promoted staff-surgeon and subsequently attained the rank of Fleet-surgeon. For a considerable period he was stationed on the West coast of Africa and also at New Zealand. The last three or four years of his service were spent on H.M.S. *Clyde*, but he retired nearly 30 years ago. Fleet-Surgeon Lawrance took no part in public affairs. In private life he was one of the most genial and kind-hearted of men. He is survived by a widow.

Medical News.

SOCIETY OF APOTHECARIES OF LONDON.—In January the following candidates passed in the subjects indicated:—

Surgery.—J. W. W. Adamson (Section II.), St. George's Hospital; A. G. H. Anthonisz (Section II.), University College Hospital; A. H. Bell, Cork and Guy's Hospital; H. E. Darlington, Birmingham; A. Dewar, McGill and Westminster Hospital; and F. M. Payne (Section II.), Royal Free Hospital.

Medicine.—J. W. W. Adamson (Section II.), St. George's Hospital; A. A. E. Baptist, Calcutta; F. G. Bennett (Section I.), Cambridge and University College Hospital; E. C. Curtis, Aberdeen and Charing-cross Hospital; C. J. Francis, Guy's Hospital; J. Hunter (Sections I. and II.), McGill and Westminster Hospital; W. Miles, Middlesex Hospital; R. Rees (Sections I. and II.), Cambridge and St. Mary's Hospital; and H. Salomon, Manchester.

Forensic Medicine.—J. Hunter, McGill and Westminster Hospital; T. G. Miles, Guy's Hospital; R. Rees, Cambridge and St. Mary's Hospital; G. Roper, Cambridge; and H. Salomon, Manchester.

Midwifery.—J. J. Anning, Leeds; F. G. H. Cooke, University College Hospital; F. I. M. Jupe, Cambridge; F. H. Maberly, Birmingham; and E. J. Miller, King's College Hospital.

The qualifying diploma of the Society in medicine, surgery, and midwifery was granted to the following candidates: J. W. W. Adamson, A. G. H. Anthonisz, A. A. E. Baptist, A. Dewar, C. J. Francis, F. M. Payne, and R. Rees.

UNIVERSITY OF CAMBRIDGE.—The following degrees in medicine and surgery were conferred on Jan. 16th:—

Bachelor of Medicine.—J. W. Rob, St. John's; K. R. Hay, Caius; and R. G. Wales, Downing.

Bachelor of Surgery.—A. G. Bate and E. I. Claxton, King's; A. H. Greg, Trinity; J. W. Rob and J. Wharton, St. John's; R. Rolfe, Clare; H. M. Wilson, Trinity Hall; C. de Lisle Carey, Emmanuel; R. G. Wales and F. E. Wood, Downing; and F. H. M. A. Beckett, Selwyn.

Dr. Barclay-Smith has been appointed Senior Demonstrator of Anatomy for a further period of five years. An additional examination for Part I. of the Third M.B. will be held early in June under the new regulations to suit the convenience of students who desire to proceed to their work for the final examination.

FOREIGN UNIVERSITY INTELLIGENCE.—*Berlin:* Dr. Gustav de Ruyter, *privat-docent* of Surgery and joint author with Dr. E. Kirchhoff of a surgical compendium, has been granted the title of Professor, as have also the following distinguished medical men who are not connected with the teaching staff of the University: Dr. Theodor Sommerfeld, a Berlin physician who has written a good deal on the subject of tuberculosis; Dr. George Meyer, who has made a special study of sanitary and ambulance organisation in England and elsewhere; and Dr. Julius Schwalbe, one of the editors of the *Deutsche Medicinische Wochenschrift*.—*Bonn:* Dr. Karl Hubert Vogel, one of the surgeons of the Johannes Hospital, has been recognised as *privat-docent* of Surgery.—Dr. Bleibtreu, Assistant in the Physiological Institute, has been granted the title of Professor.—*Breslau:* Dr. E. Storch has been recognised as *privat-docent* of Psychiatry.—*Copenhagen:* Dr. F. C. C. Hansen has been appointed to the chair of Anatomy in place of the late Professor Chievitz.—*Erlangen:* Dr. Max von Kryger has been promoted to be extraordinary professor of Surgery.—*Königsberg:* Dr. Heinrich Jäger, *privat-docent* of Hygiene, who has made some valuable bacteriological researches, has been granted the title of professor.—*Rio de Janeiro:* Dr. Miguel Conro has been promoted to the professorship of Medical Diagnosis.

VACCINATION GRANT.—Mr. S. H. Rentzsch, Week St. Mary, Cornwall, has received the Government grant for the second time in succession for successful vaccination.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—The following is the result of the poll for election to the board of management of the above hospital which was demanded at the meeting held on Jan. 9th and was declared on Jan. 23rd:—

ELECTED.	Votes.
Rev. Prebendary H. Wace	243
E. de la Rue	234
B. Speyer	202
F. O. Macmillan	202
Sir J. R. Paget	198
Melvill Green	192
Sir A. Mackenzie	191
A. Royle	191

ELECTED—*continued.*	Votes.
J. Wigan	191
J. D. Power	190
NOT ELECTED.	
J. Pearman	169
F. C. Capel	168

NEWTON ABBOT JOINT ISOLATION HOSPITAL.—The committee of this hospital has decided to erect a corrugated iron hospital to contain 12 beds to be used, if required, for small-pox cases. It will be placed in the grounds of the present hospital and will be worked from the main building. The estimated cost is about £400. The Local Government Board refused to allow the present building to be used for small-pox cases.

THE QUEEN VICTORIA JUBILEE CONVALESCENT HOME, DURDHAM DOWN, BRISTOL.—The sum of £4115, being the amount of the collections in Bristol on behalf of the "Queen Victoria Memorial Fund," has been handed to the committee of this convalescent home. This will allow the governors to make free two additional beds and to reduce the charge for paying patients from 12*s.* to 10*s.* per week. Quite recently Mr. Vaughan has followed up his previous generous contributions by a donation of £10,000 which will be devoted to the endowment of 10 free beds. This will permit 14 patients being admitted without payment. The convalescent home is much appreciated locally, for during 1901 1017 patients were received in the institution.

VACCINATION EXPENDITURE.—At the meeting of the Warminster Board of Guardians, held on Jan. 13th, it was reported that the fees for vaccination for the past quarter amounted to £165, which was an increase of £153 as compared with the corresponding quarter of 1900. A short time ago a few cases of small-pox occurred at Warminster.—At the meeting of the St. Germans (Cornwall) Board of Guardians, held on Jan. 16th, it was decided that no action should be taken, as suggested by the Cardigan Board of Guardians, in the reduction of vaccination fees, one of the guardians remarking that several people considered the public vaccinators were not so well paid as formerly, because they now had to make extra visits.

SOCIETY OF MEDICAL PHONOGRAPHERS.—This society will hold its next annual shorthand examination early in May. Two prizes will be offered, each of the value of £5, one for first-year students and one for students of more than one year's standing. The competition will be open without entrance fee to any registered medical student in the United Kingdom who has not taken a first prize at one of the society's previous examinations. It will be held simultaneously in London, Edinburgh, Dublin, and at any provincial medical centre in the United Kingdom at which not fewer than three candidates shall offer themselves. Intending candidates should send in their names as early as possible to Dr. P. G. Griffith, Bonhams, Farnborough, Hants, who will furnish them in return with a detailed prospectus of the examination. The latest date for receiving entries will be April 15th.

FREEMASONRY.—The St. Luke's Medical Lodge of Instruction held its first meeting on Monday, Jan. 20th, at the Criterion Restaurant. This Lodge of Instruction is the result of the work done by a committee representing the various medical lodges of the metropolis, which was appointed last session to consider the subject. Bro. Ernest Clarke, W.M. of the Æsculapius Lodge, occupied the chair, and was supported by Bros. W. Duncan and A. P. Luff, of the Middlesex Hospital and Sancta Maria Lodges respectively, and some 40 influential and representative members of the various medical lodges. The principal business of the evening was the passing of the by-laws, at the conclusion of which a vote of thanks to Bro. G. Rowell, the secretary of the original committee, upon whom has fallen the brunt of the work in connexion with the preliminary organisation of the Lodge, was received with acclamation and ordered to be entered on the minutes. Bro. A. L. Achard was temporarily appointed Preceptor. The St. Luke's Medical Lodge of Instruction proposes to meet on each Monday in the month, from October to May inclusive, with the exception of Mondays falling in the Christmas vacation, Easter Monday, and Whit-Monday. The secretary is Bro. J. Eyre of Embankment-chambers, Villiers-street, W.C.

SMALL-POX HOSPITAL AT BARRY.—The Barry (South Wales) District Council has resolved to erect a temporary small-pox hospital at an estimated cost of about £1000.

HEALTH OF CARDIFF.—Dr. E. Walford, the medical officer of health of Cardiff, reports that 5206 births were registered during 1901, corresponding to a rate of 31·4 per 1000; the deaths numbered 2596, being at the rate of 15·7 per 1000. Of the deaths small-pox caused 1; measles, 3; whooping-cough, 86; diphtheria, 78; scarlet fever, 29; and enteric fever, 11. The birth-rates and death-rates were calculated on an estimated population of 165,308 inhabitants.

EASTERN DISPENSARY, BATH.—The annual meeting of the subscribers of this institution was held on Jan. 16th, under the presidency of the mayor. The medical report stated that 5026 patients had been treated during 1901, exclusively of 912 who had been attended at their homes. The financial statement showed that the year commenced with an unfavourable balance of £61 and closed with a deficit of £19.

ADULTERATION IN CORNWALL.—At the meeting of the General Purposes Committee of the Cornwall County Council held on Jan. 14th it was stated that during the past five years 246 samples of milk were examined, of which 57 were adulterated, equal to a percentage of 20·7; in the United Kingdom the corresponding percentage was 10·5. The general percentage of adulteration in Cornwall was 11, against 9·1 in the country generally.

THE ROYAL INSTITUTION.—The first Friday evening meeting at the Royal Institution in the current year was held on Jan. 17th when Lord Rayleigh delivered an address on the Interference of Sound. At the outset he said that his experiments and demonstrations would be made with very short sound waves, even so short as to be inappreciable by the human ear, because the limited space of a room was unfavourable for experiments with long waves. He then proceeded to show a method of very easily measuring the length of very short sound waves. When progressive sound waves met a flat surface they were reflected back and formed stationary waves, consisting of "loops" where there was to-and-fro motion of the air but no variation of pressure, and "nodes" where there was variation of pressure but no motion. At the loops a sensitive flame flared, but at the nodes it was quiescent; at the loops sound was not perceptible to the ear, but at the nodes it was perceptible. The distance between an adjoining loop and node was evidently half a wave length. As the surface reflecting the sound was gradually withdrawn from the sensitive flame the latter alternately flared and was silent, and when by the continued withdrawal of the reflector these alternations were repeated about ten times it was easy to calculate the wave length with an error of less that 1 per cent. In this way the wave length produced by the bird-call used to excite the flame in these experiments was shown to be two centimetres. It excited the flame powerfully, but its sound was quite inaudible in the room; though when listened to close at hand it could be heard intermittently, the sound being like the distant and faint squeak of a mouse or a bat. A piece of steel which emitted a high note when struck was similarly tested and the wave length produced was shown to measure three centimetres. Numerous experiments were shown illustrating the interference of the marginal and central portions of sound waves passing through circular apertures, the best shape of foghorns for use at sea, and the analogies of the interference of light and sound. After the lecture the Duke of Northumberland, as President of the institution, unveiled a bust by the late Mr. Onslow Ford of Sir Frederick Bramwell, formerly secretary of the institution. Sir James Crichton Browne, as treasurer of the institution, accepted the bust on behalf of the members, and Sir Frederick Bramwell, who said that he was well into his eighty-fourth year, expressed his acknowledgments.

NEW ISOLATION HOSPITAL.—At a meeting of the Stratton and Bude (Cornwall) District Councils held on Jan. 14th it was decided to erect an isolation hospital available for both districts.

VACCINATION AT EXETER.—At the meeting of the St. Thomas's (Exeter) Board of Guardians held on Jan. 17th it was decided to send out notices to the different parishes calling the attention of residents to vaccination and explaining that they could be vaccinated free of charge.

COTTAGE HOMES.—A series of cottage homes has been built during the past year at Barnstaple on a site opposite to the main entrance to the workhouse, and on Jan. 17th the workhouse children went to reside in them. The homes are very neat buildings, the accommodation being admirable, and they are in charge of several foster mothers.—The Local Government Board has approved the plans for the erection, by the Bristol Board of Guardians, of cottage homes at Downend at an estimated cost of £16,920.

WEST CORNWALL INFIRMARY, PENZANCE.—The annual meeting of the subscribers of this institution was held on Jan. 15th, under the presidency of Prebendary Hedgeland. The medical report stated that the in-patients numbered 135, and that 1710 out-patients were treated, showing in both instances a considerable increase as compared with 1900. The financial statement showed that the income amounted to £937, including £219 received from the Hospital Sunday Fund. The expenditure was £869.

VALUABLE COLLECTION OF ANTIQUITIES.—The valuable collection of antiquarian and natural history objects brought together by himself and the late Mr. Richard Walter, his father, has just been presented by Mr. Walter Winter Walter, M.R.C.S. Eng., L.S.A., of Stoke-under-Ham, Somerset, to the County Museum at Taunton. The collection, which has taken 60 years to accumulate, comprises, amongst other interesting objects, a unique series of prehistoric, Celtic, Roman, and Saxon remains from Ham Hill, Somerset, said to be the largest ancient encampment in the kingdom. The collection, which will take some months to arrange, will occupy a room by itself in the museum and will bear the name of the donor. Lord Avebury has been invited formally to open the room.

DONATIONS AND BEQUESTS.—By his will the late Mr. W. J. Ford of Edinburgh leaves to the Edinburgh Royal Infirmary £4000, to the Leith Hospital £4000, to the Royal Hospital for Sick Children £1000, and to the Queen Victoria Public Institute for Nurses, Scottish branch, £1000.—Lady Grimthorpe bequeathed £100 to King's College Hospital.—The Goldsmiths' Company has granted a sum of £50 to the Samaritan Free Hospital and £200 to the funds of the Metropolitan Convalescent Institution.—By the will of Miss Catherine Holgate, of South-parade, Burnley, who died recently, and also of the legacies which now become operative under the will of her sister who died in 1894, £400 are left to the Northern Counties Hospital for Incurables, £500 to the Burnley Victoria Hospital, and £200 each to St. Mary's Hospital and the Manchester and Salford Lying-in Hospital.—A sum of £200 has been bequeathed under the will of the late Mr. A. Thorne, J.P., to the City of London Hospital for Diseases of the Chest, and the same amount to the National Hospital for Consumption at Ventnor and to the Royal Free Hospital respectively.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Prospective Legislation.

THE Session of Parliament was opened by His Majesty the King with a speech in which seven subjects of prospective legislation were mentioned. Only two of these subjects have any special interest for the medical profession, one the London water-supply and the other the amendment of the lunacy laws. It is probably safe to assume that the Bill dealing with the latter subject will follow the lines of the legislation proposed by the Government in former sessions. As for the London Water Bill its scope has been indicated by the title given to it by Mr. Long, the Minister who will take charge of it in the House of Commons, namely, "a Bill for establishing a Water Board to manage the supply of water within London and certain adjoining districts; for transferring to the Water Board the undertakings of the Metropolitan Water Companies; and for other purposes connected therewith."

The Midwives Question.

The Bill "to secure the better training of midwives and to regulate their practice" comes before the House of Commons this session, backed by Lord Cecil Manners, Mr. Tatton Egerton, Mr. Schwann, Mr. Parker Smith, Sir John Batty Tuke, Sir Savile Crossley, Mr. Eugene Wason, Mr. Tennant, and Mr. Heywood Johnstone. These gentlemen were fortunate in the ballot and have secured for the second reading of the measure the first place on Wednesday, Feb. 26th. The only risk of the Bill not being discussed on that day is that the Government may appropriate the sitting for its own business. This is a somewhat remote contingency, and therefore it behoves critics and opponents of the measure to bestir themselves.

Medical Acts (Extension) Bill.

General LAURIE has introduced again in the House of Commons his Bill bearing this title. Its general purpose is to extend the benefits of registration in this country to qualified medical practitioners in the colonies. The hon. and gallant Member was prompted to introduce the measure in the first instance by the refusal of the War Office to accept the services of Canadian rgeons for other troops in South Africa than those sent from t ominion. The Bill has never been discussed in the House and the spect of its being discussed during the present session is but slight.

The Pure Beer Bill.

This measure, with which the name of Sir CUTHBERT QUILTER has been long identified, is once more before the House of Commons. Its promoters secured a good place in the ballot and the second reading of the Bill stands as the first order for Wednesday, April 23rd.

Cremation.

Lord MONKSWELL has introduced into the House of Lords a Bill for the regulation of the burning of human remains and to enable burial authorities to establish crematoria.

HOUSE OF COMMONS.

FRIDAY, JAN. 17TH.

Preservatives and Colouring Matters in Food.

Mr. CHANNING asked the President of the Local Government Board what steps he proposed to take in pursuance of the report of the Committee on Preservatives and Colouring Matters in Food.—Mr. LONG replied that he had not yet arrived at any decision with regard to this report; he was still considering it.

The Housing of the Working-classes.

At this sitting of the House there was a long debate on the question of the housing of the working-classes. It was raised in connexion with the Address to the King in acknowledgment of the Speech from the Throne at the opening of the session. Dr. MACNAMARA moved an amendment to add these words to the Address—viz., "And we humbly represent to your Majesty that the greatest hardships are inflicted upon many of your working-class subjects by reason of the lack of proper housing accommodation, and that immediate Parliamentary attention to this evil is one of the most pressing of the necessities of domestic policy."—Mr. WALTER LONG, President of the Local Government Board, made the reply on behalf of the Government. He assured the House that this question was receiving the most serious attention of his department, and with regard to the case of the metropolis he reminded Members that already two large schemes under the Act of 1900 had been embarked on in London. He did not suggest that all the blame for what had been left undone rested with the local authorities, for he knew that in many cases they were striving with all their might to deal with this great problem; but some of them had been endeavouring to provide dwellings on land of such a value that it was impossible to let them at a rent within the reach of the people whom it was sought to benefit. In Hull admirable work had been done. There the local authority had cleared the slum area and had constructed a fine thoroughfare leading into the less populous parts of the town, and the private individual had come forward and put up suitable buildings on the property adjoining, the corporation doing the lighting, draining, and so forth. He ventured to think that that was the best solution of the problem where it was possible. On the subject of the proposed extension of the period for the repayment of loans Mr. Long announced that it was the intention of the Government to ask for the appointment this session of a committee of inquiry. He hoped that he would be able during the session to deal with the borough funds question, which did, no doubt, put difficulties in the way of some municipalities, and there were one or two other small matters which impeded local authorities in their usefulness, and which, he hoped, might be amended also this session. The House had been told that sometimes when a local authority put into force the powers it undoubtedly possessed and succeeded in closing an insanitary area it had to pay a great deal more for the land than it ought. There was insanitary property and insanitary property. In some cases a property became insanitary through the gross neglect of the owner, and clearly in such cases the owner ought to get no more than the actual value of the land. But a great deal of property became undesirable for habitation through no fault of the owner. There was often a confusion between these different classes of property; and he did not think that the majority of the House would ever consent to the confiscation of property solely because it was desired to make provision for the working-classes who wanted better houses. He had been engaged in the examination of this question, and he would look further into it; and he could assure the House that if he found, either with regard to the question of valuation or to any other part of the administration of the Act, that he required the assistance of a committee he would not hesitate to ask the House to consent to its appointment. He agreed with the suggestion that the whole of the administration of the Housing Acts should be in the hands of one central authority. A

change in this direction would be useful, inasmuch as it would keep all matters of administration in one department. It was quite clear, too, that there was room for an amendment of the law which would enable local authorities in carrying out their re-housing schemes to build shops and clubrooms as part of, or attached to, the buildings which they proposed to erect. The suggestion had been frequently urged by local authorities, and he thought that its adoption would be of some benefit to them.

At the close of the debate a division was taken in which DR. MACNAMARA'S amendment was rejected by 30 votes.

MONDAY, JAN. 20TH.

The Small-pox Hospital Ships in the Thames.

Lieutenant-Colonel TUFNELL asked the President of the Local Government Board whether his attention had been called to the continued increase of small-pox on the Essex coast near Purfleet; and would he state what steps the Government proposed to take to cause the immediate removal of the small-pox hospital ships now moored there.—Mr. J. A. PEASE asked the right hon. gentleman whether he was aware that the medical officer of health for the county had reported that the recent outbreak of small-p ox was attributable to the presence of these vessels, and had recommended that they should be withdrawn from the precincts of the Essex coast.—Mr. LONG replied: I am not aware of that fact, but there is no dispute as to the fact that the presence of the small-pox hospital ships must cause some infection. In answer to my hon. and gallant friend I have to say that I am aware of the occurrence of small-pox on the Essex coast, and have caused a medical inspector to communicate with the local authorities in the districts concerned. As regards the second part of the question, the managers of the Metropolitan Asylums District are doing everything in their power to provide the hospital accommodation necessary for the reception of small-pox cases from the metropolis; but, looking to the large number of these cases, I do not in the present circumstances propose to interfere with the discretion of the managers as to the use of the ships to which my hon. and gallant friend refers, and which have been moored in the Thames since 1885. It is impossible to select a place either for ships or hospitals on land which would not be in some degree exposed to the same drawbacks. But the managers are doing their utmost to deal with the serious epidemic and I cannot, in the present circumstances, recommend that the ships should be removed. —Mr. D. J. MORGAN asked whether the ships could not be moved further down the river to a point where there was practically no population on either side.—Mr. LONG: I cannot answer that question definitely, but I can say that every possible trouble has been taken to find another mooring place. As my hon. friend knows it is necessary that there should be communication with the shore so that patients may be easily taken to the vessels, and at present we have not been able to suggest any new place. I will, however, take into consideration any definite suggestion my hon. friend may like to make.—Mr. BARTLEY: Do the Government contemplate any legislation in view of this epidemic?—Mr. LONG: No, sir; no legislation is necessary, that I am aware of, of any kind.

TUESDAY, JAN. 21ST.

Vaccination Proceedings.

Mr. LOGAN asked the Secretary of State for the Home Department if his attention had been directed to proceedings in the North London Police-court on Jan. 11th, when an application was made for a certificate of exemption under the Vaccination Act, 1898, and refused, apparently on the ground that the applicant declined to enter into a discussion with the presiding magistrate; and whether he proposed to take any action in the matter.—Mr. RITCHIE replied: I have seen a newspaper cutting which the hon. Member has been good enough to send me. The law is that a person is not entitled to exemption unless he satisfies the magistrate that he conscientiously believes that vaccination would be prejudicial to the health of the child in question. I gather from the newspaper cutting that the applicant in this case did not so satisfy the magistrate. There are no steps which I can take in the matter.—Mr. LOGAN: Is it not enough for the applicant to say that he conscientiously objects to vaccination?—Mr. RITCHIE: I cannot enter into the mind of the magistrate. It is the magistrate who is to be satisfied, not I.

The Government and the Early Closing of Shops.

Mr. BALFOUR, in reply to a question addressed to him by Sir CHARLES DILKE, said that the subject of the early closing of shops had been under the consideration of the Government, but having regard to the other work which would come before the House they could not hold out any hope of legislation with reference to it during the present session.

BOOKS, ETC., RECEIVED.

ARNOLD, EDWIN, 37, Bedford-street, Strand, W.C.

Human Embryology and Morphology. By Arthur Keith, M.D. Aberd., F.R.C.S. Eng. Price 12*s.* 6*d.* net.

Manual of Alcoholic Fermentation and the Allied Industries. By Charles G. Matthews, F.I.C., F.C.S., &c. Price 7*s.* 6*d.* net.

DOIN, OCTAVE, 8, Place de l'Odéon, Paris.

Leçons sur les Maladies du Système Nerveux (année 1897-1898). Par F. Raymond, Professeur de Clinique des Maladies Nerveuses à la Faculté de Médecine de Paris. Recueillies et publiées par le Dr. E. Ricklin. Quatrième série. Price 15 francs. Ditto, année 1898-1899, cinquième série, price 16 francs.

EVERETT, R. A., AND CO., 42, Essex-street, Strand, W.C.

A Bee among the Bankers. By Henry Warren. Price 3*s.* 6*d.* net.

F. A. DAVIS COMPANY, Philadelphia.

A Brief Manual of Prescription Writing in Latin or English. For the Use of Physicians, Pharmacists, and Medical and Pharmacal Students. By M. L. Neff, A.M., M.D. Price, extra cloth, 75 cents, net, delivered.

A Practical Treatise on Materia Medica and Therapeutics, with especial reference to the Clinical Application of Drugs. By John V. Shoemaker, M.D., LL.D. Fifth edition. Thoroughly revised. Price not stated.

NAUD, C., 3, Rue Racine, Paris.

Maladies de la Voix. Par le Dr. André Castex, Chargé du Cours de Laryngologie à la Faculté de Médecine de Paris. Price 7 francs.

PHILIP, GEORGE, AND SON, 32, Fleet-street, E.C. (PHILIP, SON, AND NEPHEW, Liverpool).

Mosquito Brigades and How to Organise Them. By Ronald Ross, F.R.C.S., D.P.H., F.R.S. Price 3*s.* net.

REBMAN, Limited, 129, Shaftesbury-avenue, W.C.

The Medical Treatment of Gall-stones. By J. H. Keay, M.A., M.D. Price 3*s.* net.

SCIENTIFIC PRESS, Limited, 28 & 29, Southampton-street, Strand, W.C.

Poison Romance and Poison Mysteries. By C. J. S. Thompson, F.R.Hist.S. New and revised edition. Price 2*s.* 6*d.*

SMITH, ELDER AND CO., 15, Waterloo-place, S.W.

On the Principles and Exact Conditions to be Observed in the Artificial Feeding of Infants: the Properties of Artificial Foods and the Diseases which Arise from Faults of Diet in Early Life. By W. B. Cheadle, M.A., M.D. Cantab., F.R.C.P. Fifth edition. Edited and revised by F. J. Poynton, M.D., M.R.C.P. Price 5*s.*

SWAN, SONNENSCHEIN, AND CO., Limited, London.

Failures of Vegetarianism. By Eustace H. Miles, M.A. Price 3*s.*

Recent Object-lessons in Penal Science, with a Biographical Introduction. By A. R. Whiteway, M.A., Barrister-at-law. Third series. Price 3*s.* 6*d.* net.

WHITAKER, J., AND SONS, LIMITED 12, Warwick-lane, Paternoster-row, E.C.

Whitaker's Peerage for the Year 1902. Price 2*s.* 6*d.*

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

BANNISTER, W. J., has been appointed Junior House Surgeon to the Macclesfield Infirmary.

BEDFORD, G. H., L.S.A., has been appointed Medical Officer of the Rothbury Union.

DENT, HOWARD, M.B. Durh., F.R.C.S. Eng., has been appointed Assistant Surgeon to the Wolverhampton and Staffordshire General Hospital.

ERSKINE, A. M'C., M.B., B.Ch. R.U.I., has been appointed Medical Officer to the Goole Urban Council and Superintendent of the Fever Hospital at Goole.

GOVER, J. MAXWELL, M.B., B.S. Durh., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer to the Gosforth District of the Castle Ward Union, Newcastle-upon-Tyne.

GREENWOOD, C. H., M.B., Ch.B. Vict., has been appointed Resident Casualty Officer to the Leeds General Infirmary.

JACKSON, ARTHUR M., M.D. Oxon., M.R.C.S., has been appointed Medical Superintendent of the Notts County Lunatic Asylum.

LITTLEWOOD, J. O., M.R.C.S., L.R.C.P. Lond., D.P.H., has been appointed Visiting Medical Officer to the Nottingham and Nottinghamshire Sanatorium for the Treatment of Consumption, Sherwood Forest, Mansfield.

O'CONNOR, J. R., M.B., B.S. R.U.I., has been appointed Medical Officer of Health for the Urban District of Wigston.

THOMPSON, WM. ATKIN, M.R.C.S. Eng., L.R.C.P. Lond., has been appointed House Surgeon to the Rochdale Infirmary.

WALLIS, C. EDWARD, M.R.C.S., L.R.C.P. Lond., has been appointed Dental Surgeon to Rochester House Asylum under the Metropolitan Asylums Board.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BOLTON INFIRMARY AND DISPENSARY.—Junior House Surgeon. Salary £80 per annum, with apartments, board, and attendance.

BRADFORD ROYAL INFIRMARY.—Dispensary Surgeon, single. Salary £100 per annum, with board and residence.

BRECON INFIRMARY.—Resident House Surgeon, unmarried. Salary £100 per annum, with apartments, board, attendance, fire, and gas.

CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn-road.—House Surgeon. Salary at rate of £50 per annum, with board and residence.

CORPORATION OF LONDON.—Female Sanitary Inspector. Salary £125 per annum, rising to £150.

COUNTY ASYLUM, Chester.—Third Assistant Medical Officer, unmarried. Salary £160 per annum, with board, lodging, and washing.
COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Officer, unmarried. Salary £150 per annum, with increase, and apartments, board, attendance, and washing.
DEVONSHIRE HOSPITAL, Buxton, Derbyshire.—House Surgeon and Assistant House Surgeon. Salary, House Surgeon £100 per annum, Assistant £50 per annum, with apartments, board, and lodging.
DURHAM COUNTY ASYLUM.—Junior Assistant Medical Officer. Salary £140, rising to £160, with board, laundry, and attendance.
EAST SUFFOLK AND IPSWICH HOSPITAL.—Second House Surgeon. Salary £80 per annum, with board, lodging, and washing.
ESSEX AND COLCHESTER HOSPITAL, Colchester.—Assistant House Surgeon (unmarried). Salary at rate of £50 per annum, with board, lodging, and washing.
FISHERTON ASYLUM.—Assistant Medical Officer, unmarried. Salary £150 per annum, with board, lodging, and washing.
GENERAL HOSPITAL, Wolverhampton.—Assistant House Physician, also Assistant House Surgeon, both for six months, with honorarium at rate of £75 per annum, and board, lodging, and washing.
HASTINGS, ST. LEONARDS, AND EAST SUSSEX HOSPITAL.—House Surgeon, unmarried. Salary £75 per annum, with residence, board, and washing.
HOSPITAL FOR WOMEN, Soho-square (The London School of Gynæcology).—Clinical Assistantships.
HUNTINGDON COUNTY HOSPITAL.—House Surgeon. Salary £60 per annum.
KENT COUNTY ASYLUM, Barming Heath, Maidstone.—Fourth Assistant Medical Officer and Pathologist, unmarried. Salary £175 per annum, rising to £200, with quarters, attendance, &c.
LINCOLN COUNTY HOSPITAL.—Junior Male House Surgeon for six months, eligible for re-election. Honorarium of £25 for each period of six months, with board, residence, and washing.
LONDON HOSPITAL, Whitechapel, E.—Assistant Director of the Pathological Institute. Salary £200 per annum.
MONSALL FEVER HOSPITAL, Manchester.—Third Medical Assistant. Salary £100 per annum, with board and lodgings.
NEW HOSPITAL FOR WOMEN, 144, Euston-road, N.W.—Resident Medical Officer (female) for six months.
NORTH DEVON INFIRMARY, Barnstaple.—House Surgeon. Salary £80 per annum, with board, residence, and washing.
NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, N.E.—House Surgeon for six months. Salary at rate of £80 per annum, with board, residence, and laundry.
PADDINGTON GREEN CHILDREN'S HOSPITAL, London, W.—Surgeon to the Throat and Ear Department.
POPLAR HOSPITAL FOR ACCIDENTS, Poplar, E.—Resident House Surgeon. Salary £135 per annum, with board and residence.
QUEEN ADELAIDE'S DISPENSARY, Pollard-row, Bethnal Green-road, E.—Honorary Surgeon Dentist.
ROYAL ALBERT HOSPITAL, Devonport.—Assistant House Surgeon for six months. Salary £50 per annum, with board, lodging, and washing.
ROYAL HALIFAX INFIRMARY.—House Surgeon, unmarried. Salary £120 per annum, with residence, board, and washing.
ST. MARY'S HOSPITAL, Paddington, W.—Casualty Physician. Salary £75 per annum.
ST. PANCRAS AND NORTHERN DISPENSARY, 126, Euston-road.—Resident Medical Officer, unmarried. Salary £105, with residence and attendance.
SALFORD UNION INFIRMARY, Hope, near Eccles.—Resident Medical Officer. Salary £150 per annum, with apartments and attendance.
SEAMEN'S HOSPITAL SOCIETY (Branch Hospital, Royal Victoria and Albert Docks, E.).—House Surgeon. Salary £50 per annum, with board and residence.
STROUD GENERAL HOSPITAL.—House Surgeon. Salary £80 per annum, with board, lodging, and washing.
VICTORIA CHILDREN'S HOSPITAL, Park-street, Hull.—Lady Assistant House Surgeon. Salary £40 per annum, with board and laundry.
WEST BROMWICH DISTRICT HOSPITAL.—Resident Junior House Surgeon. Salary £50 per annum, with board, lodging, washing, and attendance.
WESTERN GENERAL DISPENSARY, Marylebone-road.—Honorary Surgeon.
WESTMINSTER GENERAL DISPENSARY.—Resident Medical Officer. Salary at rate of £120 per annum, with rooms, gas, coal, and attendance. Also Honorary Surgeon.
WREXHAM INFIRMARY.—House Surgeon. Salary £100 per annum, with board, washing, &c.

Births, Marriages, and Deaths.

MARRIAGES.

HARTLEY—WIMSHURST.—On Jan. 16th, at St. Mary's Church, Waterloo, Liverpool, John Hartley, M.B., Ch.B. Vict., to Edith Blanche, daughter of the late H. W. Wimshurst.
ROCHE—CRASKE.—On Jan. 22nd, at Borstal St. Matthew, Rochester, by the Rev. A. Cooper Marsden, B.D., Alfred R. Roche, B.A.Cantab., M.R.C.S., L.R.C.P., third son of Dr. William B. Roche, London, to Mary Louisa, eldest daughter of W. R. Craske, Esq., The Manor, Borstal, Rochester.

DEATHS.

HILLS.—On Jan. 18th, at the Chantry, Norwich, suddenly, William Charles Hills, M.D. Aberd., aged 75.
WINGATE.—At Easington, co. Durham, suddenly, aged 38 years, Donald Wingate, M.B., C.M., Medical Officer for Easington Union. Friends please accept this intimation.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

ARTIFICIALLY MATURED (?) WHISKY.

To the Editors of THE LANCET.

SIRS,—Is not your whisky expert in THE LANCET of Jan. 11th, 1902, p. 109, just a little pessimistic—"cocksure" that "what is is best" in whisky? Discouraging, and therefore deterrent, to the patient experimenters who spend laborious hours (and sometimes brains) in trying to assist and hasten nature, by nature's own means, in improving whisky? Or does he hold a brief for the anxious whisky makers, who "carry stocks" of millions of gallons of this popular stimulant, and for whom "time means money" and quick maturation ruin? His facts are correct, but partial, and marshalled against progress. If German chemists had listened to similar warnings by interested parties the splendid success of artificial indigo production would not have been. But now it is the planters of nature's indigo who have the blue look-out. The blind supporters of time storage for maturing whisky may take a warning. Your author is right when he says that "countless attempts have been made," but wrong when he states that no real success has been attained (comparable with age) in improving and mellowing whisky. I admit that whisky would cease to be whisky if "fusel oil" (that bogie!), furfurol, and "probably other aldehydes" (his vague words) were removed. It is probable that the resultant spirit would be "wholesome," but no Scotchman would drink it. I admit that "those very products, raw, harsh, and disagreeable in young whisky," cause the seductive aroma, "gout," bouquet, "pleasing flavour," &c., which charm the appreciative drinker of old whisky. But I assert that it is not "time, and time alone," which works this happy change. Your author will, of course, know—what I merely state now for the benefit of those of "common and erroneous belief"—that whisky hermetically sealed in glass vessels is not changed, altered, improved, or spoilt by any lapse of "time, and time alone." This proves that *it is not time alone*, but some natural agency working through the wooden cask in time, which improves whisky and opens up a field full of promise for the inventive chemist. I have talked with the biggest producers and holders of Scotch whisky. They all frankly admit that a successful system of speedy maturation would be disastrous to them and sincerely wish failure to the inventor of any such process. It is obvious that to the holder of bonded whisky, staggering (financially) under the heavy stock he is carrying, any such successful system would spell ruin, or at least heavy loss. Good whisky does good to millions, and perhaps harm to a few. Bad whisky does nothing but harm to every poor wretch, black or white, who is fool enough to drink it. It is reasonable, therefore, that our Government should decide on a standard of quality before whisky is allowed to reach the public. But "time alone" should not be the test. The rich man can afford to pay the high price necessary for old whisky which has been nursed for years in expensive storage with all the consequent cost and loss. The poor man who likes whisky will be the immediate direct gainer by any successful system of speedy maturation. In Switzerland and Russia this is already accepted and practised. Their chemical and expert tests are very stringent, but "time" is not insisted upon nor any special process. Results alone are approved and passed, and the public safeguarded. Machines and processes are now in use in France, Russia, and Switzerland by distillers whose name is their most valued asset, and which quite satisfy the Government requirements. This does not please our whisky holders who press "time and time alone" on our Government as a safeguard, but it encourages diligent inquirers and inventors. o up-to-date whisky chemist proposes to "eliminate" or "chemically abstract" the "raw bodies" which make the whisky, but even your author will surely allow him to assist nature's agencies if the result passes the judgment of the gourmet, the connoisseur, and the chemist. This is simply making *old whisky* in a short time, and this can be, and is being, done, as your author may see if he communicates with me. The last sentence of your article seems peculiarly unfortunate. When one recalls the vast strides made in recent years by original thinkers, inventors, and chemists (names are needless) in surgery and medicine, it seems ungraceful to smite the humble experimenter in whisky who is working for the good of his fellow men and a living. He might shrewdly retaliate without being so arrogant as your writer who says: "Such artificial preparation can *never* be looked upon as fit to replace the spirit mellowed by age, and *any attempt to substitute it is to be deplored* and *certainly on medical grounds to be discountenanced strongly*." The italics are mine. I inclose my card.

I am, Sirs, yours faithfully,

Jan. 15th, 1902. H_2O.

*** We adhere to our opinion. Nothing will convince us that "old whisky" can be made "in a short time."—ED. L.

A CHANGE OF UNIFORM.

MEMBERS of the Greenwich Union Board of Guardians have been, according to their various senses of humour, amused or shocked of late by the reported appearance of nurses in kilts at a fancy dress ball. Some members of the body declared that the wearing of kilts merely

showed what a strong hold Scotch sentiment had, while the chairman, Mr. Donald McCall—whose name certainly suggests a kilty sympathy—gravely declared that he was not prepared to admit that the wearing of kilts was an act of indecency. It certainly is a novel theme—the indictment of women for wearing a skirt. Prudery has shrunk from a Scottish piper, but we always imagined that even Mrs. Grundy would tolerate a female under similar circumstances and garments. The matter eventually dropped—perhaps with the hope that to some extent the kilts would do likewise.

POOR-LAW MEDICAL OFFICERS' SUPERANNUATION.

To the Editors of THE LANCET.

SIRS,—As a subscriber to THE LANCET for 38 years I shall feel extremely obliged if you will kindly give me some information in the following matter. I have been medical officer of a district of a union for 31 years. My age limit will be up in June which will make the service nearly 32 years. My subscription to the Poor-law Officers' Superannuation Fund has been deducted every quarter from my salary since the formation of the fund. What I should like to know is, is the pension reckoned on the salary only and how much percentage, or on the emoluments altogether, such as salary and vaccination and lunacy fees combined? I am, Sirs, yours faithfully,

Jan. 20th, 1902. G. P.

*** The superannuation is reckoned on the "salary or wages and emoluments." "Emoluments" are defined as "all fees, poundage, and other payments made to an officer as such; also the money value of any apartments, rations, or other allowances in kind appertaining to his office." Vaccination fees are not due to our correspondent as a district medical officer. They are paid to him as a public vaccinator under a contract which is not necessarily connected with his position as a district medical officer. For this reason vaccination fees have been considered not to be emoluments, and the superannuation deduction has not been made from them. They will therefore not be included when the calculation of the superannuation amount is made. "G. P." having had more than 15 years' service at the time of the passing of the Act would be charged 3 per cent. on his salary and emoluments. In the latter lunacy fees and extra-medical fees certainly should be included.—ED. L.

MEDICAL AID ASSOCIATIONS AND THE GENERAL MEDICAL COUNCIL.

To the Editors of THE LANCET.

SIRS,—I am glad that your correspondent Mr. Harry Clough in THE LANCET of Jan. 18th, p. 207, appreciates my kindness and recognises my rapidity of perception and lucidity of expression. Such an appreciation tempts me to epitomise and to criticise further his arguments. I quite believe that he did not wish to provoke argument with me, for I believe he was unaware of my existence, but he must not take exception to my pleading a different opinion to himself *re* the action of the General Medical Council and giving expression to it. If his letter did not invite criticism, why, then, did he take the trouble to have it inserted? I fail to see the application of the argument *re* a works club. A club of this description is a very different thing to a medical aid association, as I will endeavour to point out. Workpeople may be taken to mean persons who are able-bodied or it is presumed they would not be at work. This means less attendance and more time for each individual case. The fact that they are able to work is a certain guarantee as to health. Works clubs are usually composed of men and there is the chance of private attendance on their families. In a medical aid association there is smaller remuneration, members and families are admitted without any guarantee as to health, they sweep in all and sundry, people who are able to pay and people afflicted with chronic illness or at least in doubtful health. Anyone who has had charge of a large works club, say, of 1000 members and a similar number of medical aid patients knows the relative amount of attendance demanded by each. Again, the money collected from the workpeople is deducted from their wages at the pay-office and remitted to the medical officer with in some instances a small deduction for collection—In the case of the medical aid association a large company prostitutes the services of professional men for its own gain and as a bait for insurance of a questionable kind. In the one case there is canvassing from door to door, but this is not so with a works club. Now, I ask, Is it common sense to allow the profession to be cheated out of a large portion of its legitimate earnings to support such an organisation? I assert that the unqualified assistant has not been replaced by the unqualified medical student—the fully-qualified medical man has taken his place except in rare instances. I hold all collective physicking to be dishonourable and degrading, both to the profession and to the public. I classify as humbug the professing to do an impossibility—and it is a physical impossibility to do more than a given number of cases in a given time; that is, to do them properly. There may be many deserving cases in the medical aid association, but there is also a large proportion of cases that are not. Is the medical man to suffer for the luxury of these people and provide them with medicine and attendance at a penny and a halfpenny a week when they can pay from eighteenpence to 4*s.* a week for organs, pianos, bicycles, phonographs, and other articles not strictly necessary to their well-being? There is no wage-limit. Is it common sense to hold a club of this description? As to the General Medical Council, if your correspondent will take the trouble he will see that the general practitioner is very well represented for two reasons. There are Direct Representatives who are, or have been, general practitioners. There are University Representatives who will keep up the status of the profession in order to make it more attractive and so induce more men to enter. I maintain that the Council has acted in the best interests of the profession and the public in prohibiting the association of medical men with insurance clubs. Medical men are notoriously unbusinesslike, and I do not suppose that any other body of men would tamely submit to having their services exploited as we have done. The care of the poor is in the hands of the State and should not be in the hands of self-interested lay associations who practise cheap philanthropy at the expense of the profession. Organisation is necessary all along the line and there is ample room for improvement in every direction. If the General Medical Council makes its measures drastic the quicker will the reform be and the nearer the ideal. In days gone by men (and young ones at that) used to strive for ideals and revolutions were accomplished. Nowadays we are satisfied with any makeshift. I venture to predict that the Council will carry out its implied intentions and I know that the young practitioner will benefit amongst others. It is by organisation that we will accomplish reforms and not by submitting to the lay exploitation of our services and unfair competition. I will leave it to time to prove the truth of my remarks to Mr. Harry Clough. And I shall be glad if he will be good enough to write me 10 years hence, and then give me his opinion of medical aid associations formed on his experience in the interval. Apologising for having taken up so much of your valuable space,

I am, Sirs, yours faithfully,

Leicester, Jan. 18th, 1902. JOHN MACCORMAC.

EXCISION OF GASTRIC ULCER.

To the Editors of THE LANCET.

SIRS,—Can you inform me, through the medium of your "Answers to Correspondents," if there has been published in THE LANCET or elsewhere an article similar to that on page 86 of your issue of Jan. 11th, 1902, only in regard to perforating gastric ulcer, where the ulcer has been excised. I am, Sirs, yours faithfully,

Jan. 20th, 1902. E. N. B.

*** A paper by Mr. R. F. Jowers, which appeared in THE LANCET of March 2nd, 1895 (p. 544), narrated a case under his own care and gave a table of cases under the care of other operators. Since the date of this paper numerous instances have been recorded.—ED. L.

FEES FOR INSURANCE EXAMINATIONS.

To the Editors of THE LANCET.

SIRS,—I am not fond of controversy in print at any time and least of all with an opponent who skilfully and wisely conceals his identity behind a *nom de plume*; but as some of your readers may be misled by the latest contribution on this subject, I venture to ask space for a brief reply, promising that I shall not trouble you further. If "Vigilans" has "sometimes" had fees of any kind from this company, he must hold a letter of appointment which stipulates that the minimum fee payable for an examination is 10*s.* 6*d.*, but even if it had been true that he had "sometimes received 5*s.*," that would at least involve complicity on his part in the arrangement, and therefore he would have had no right to complain. To slightly paraphrase your correspondent's own words, "It does seem strange that while holding a company's appointment and receiving its fees, he should be conspicuous (as far as a *nom de plume* will admit of this) in endeavouring to injure it." The fee that I have already discussed has related to sickness insurance alone, and is, of course, often exceeded. Some annual premiums are as low as £1 2*s.* 10*d.* per annum, and there are no large premiums as in life assurance to equalise matters. Our critics, I think, should in common fairness compare the fee we offer with that paid by friendly societies whose business also is sickness insurance. Comparison, I apprehend, would not be unfavourable to us.

I am, Sirs, yours faithfully,

HENRY BROWN,

Jan. 22nd, 1902. Manager, Century Insurance Company, Limited.

HONOURS TO EDWARD JENNER A HUNDRED YEARS AGO.

Bonner and Middleton's Bristol Journal, afterwards the *Bristol Mirror*, of Jan. 16th, 1802, contains the following:—

"The Royal Economical Society of Madrid has admitted into its bosom, with the title of Associates of Merit, Count Rumford and Dr. Jenner, the inventor of vaccine inoculation."

"A subscription has been commenced in Gloucestershire, patronised by many noblemen and respectable gentlemen of that county, for presenting Dr. Jenner with a piece of plate for his discovery of vaccine inoculation. The subscription already exceeds £300."

A RAPID RECOVERY.

FROM a letter in the *Daily Dispatch* we gather some details of a "cure" as remarkable in its method and prompt results as we fear it is unlikely to be available in genuine cases of typhoid fever. "A young lady in a west-country town was ill with typhoid fever—so ill that hope of recovery had been abandoned by the doctor. Her father consulted an old woman in a village five miles distant with a reputation for cures. She gave him a charm and told him to obtain certain portions of the intestines of a newly slaughtered sheep. The charm

was to be tied round the patient's neck and the intestines of the sheep attached to the soles of the feet. This was done: in a couple of hours no trace of the fever remained. The charm and the intestines were then burned." Of course, with no definite knowledge of the nature of the charm we cannot discuss this therapeutic triumph. At first sight it would seem simpler to place the intestines round the neck and the charm somewhere else. We are inclined to believe that the effect would have been much the same.

A HOME WANTED.

To the Editors of THE LANCET.

SIRS,—Can any medical man in the country recommend a respectable couple in a quiet secluded village who would be willing to take care of a gentleman, aged 42 years? The patient has a chronic skin disease (no discharge) and his faculties are much blunted, but though feeble-minded he is rational and amenable. He was formerly in good circumstances and was decidedly a *bon vivant*, but is now reduced to penury. His friends would, however, be able to pay a moderate charge for his board and lodging, say, £1 a week. He is not a fit case for hospital or asylum, and his friends desire that he should be far away from London, where he is exposed to undesirable influences. Devonshire or Cornwall would be preferred, but any suitable place not less than 100 miles from London would do.

I am, Sirs, yours faithfully,

Jan. 22nd, 1902. L.R.C.P. & S. ED.

A QUERY IN ETHICS.

To the Editors of THE LANCET.

SIRS,—Will you kindly let me know in your columns next week whether there is any ethical objection to a medical man writing to secretaries of assurance companies offering to act as medical referee?

I am, Sirs, yours faithfully,

Jan. 17th, 1902. YOUNG PRACTITIONER.

*** Yes, there is every objection.—ED. L.

THE OPEN-AIR TREATMENT OF TUBERCULOSIS.

To the Editors of THE LANCET.

SIRS,—Is there any place where by giving an annual subscription a City Company could obtain two or three letters of admission per annum? Perhaps some of your readers could help me. Ventnor and Bournemouth both ask for payment from the patients in addition to a letter of recommendation. I am, Sirs, yours faithfully,

Jan. 20th, 1902. THANE.

A RASH RESEMBLING THAT OF VARIOLA PRODUCED BY THYROID EXTRACT.

To the Editors of THE LANCET.

SIRS,—Thyroid tabloids may, and do at times, produce a papular rash, which may possibly be mistaken for the early rash of variola, and more especially so if any backache or elevation of temperature is present. The rash is generally accompanied by much itching and lasts for about six weeks after the remedy is discontinued; it again reappears on resuming the remedy.

I am, Sirs, yours faithfully,

Putney, S.W., Jan. 15th, 1902. ALBERT S. MORTON, M.D. Durh.

ADMINISTRATION OF ANÆSTHETICS DURING LABOUR.

To the Editors of THE LANCET.

SIRS,—Would some of your correspondents favour me with their views as to the best way of administering chloroform during labour when one is single-handed? This subject is one which receives little attention in text-books and I have not been able to obtain much information on the subject from this source.—I am, Sirs, yours faithfully,

Jan. 17th, 1902. M.D.

*** Our correspondent is referred to the report of the proceedings of the Leeds and West Riding Medico-Chirurgical Society (p. 230), where he will find a description of an instrument which was shown to the society by Mr. C. J. Wright.—ED. L.

MOTOR-CARS FOR MEDICAL MEN.

To the Editors of THE LANCET.

SIRS,—Now that our profession is beginning to recognise that the motor-car is bound to supersede the horse for making our daily visits, especially in those cases where long country rounds are made, perhaps a few words of advice from one who has used a car ever since the Act of 1896 came into force may be of some service to intending purchasers. I have tried all kinds of cars and motor cycles, but for absolute reliability, quietness, and appearance I can recommend the "genuine geared Benz," either the 4½ or 7 horse-power; the former is quite sufficient where fairly level, the latter in hilly districts. A great point in favour of these cars is the very small amount of fuel they consume; my car, a 4½, runs from 60 to 70 miles on two gallons of petrol at a cost of 2*s.* 4*d.* The high speed vertical engine with its row of dirty lubricators is of no practical use to a medical man; besides, its appearance is against it. The inclined wheel steering may be very nice for touring, but a great disadvantage to a man who has to be getting continually in and out. A hood also is most comfortable, and should be on every car. To sum up, I give the Benz car the first place for:—(1) its reliability; (2) its slow-running engine; (3) its good appearance; (4) the small amount of petrol consumed; (5) its extreme quietness; (6) its comparative cheapness; and (7) the easy starting. The engine can easily be started without turning a hand or pulling at the flywheel by a very simple device. Any medical man contemplating buying a car who cares to drop me a line shall have any assistance I can give him with pleasure.

I am, Sirs, yours faithfully,

St. Albans, Jan. 20th, 1902. T. PRICHARD ROBERTS.

Oppressed.—A district medical officer must attend a sick person on receiving the usual order to do so, even when the sick person does not seem to him to be a proper person for such relief; as, for example, in the case of a hired servant, a member of a club, or a person in receipt of other relief. He can, and indeed should, bring before the notice of the guardians on the earliest possible occasion—that is to say, at their next meeting—any circumstances that, in his opinion, disentitle the patient in question to medical relief; and it is the duty of the guardians not to order medical relief or any other form of parish relief in cases not properly the subject of such relief.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (27th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.) St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.) West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (28th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.).

WEDNESDAY (29th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic, 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.), Throat, Golden-square (9.30 A.M.).

THURSDAY (30th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.).

FRIDAY (31st).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic (10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square, (9.30 A.M.), City Orthopædic (2.30 P.M.).

SATURDAY (1st).—Royal Free (9 A.M. and 2 P.M.), London (2 P.M.) Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.), Throat, Golden-square (9.30 A.M.)

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (27th).—SOCIETY OF ARTS.—8 P.M. Dr. S. Rideal: The Purification and Sterilisation of Water. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—8.30 P.M. Discussion on The Nature and Treatment of Obesity (opened by Sir T. Lauder Brunton). (Council Meeting Night.)

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (20, Hanover-square, W.).—7 P.M. Council. 8 P.M. Communications:—Mr. E. B. Dowsett: Sections of a Human Tooth showing Plici-Dentine (?).—Mr. C. W. Glassington: A Composite Odontome.—Mr. F. W. Collingwood: A Slight Modification of Patterson's Prolongation Apparatus.—Mr. E. Lloyd-Williams: A Fatal Case of Alveolar Abscess.—Dr. E. A. Peters: Suprarenal Extract in Dental Surgery.

TUESDAY (28th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Adjourned Discussion on Dr. S. M. Copeman's paper on Modern Methods of Vaccination and their Scientific Basis. Dr. Greenwood, Dr. S. Coupland, Dr. L. Parkes, Dr. Eddowes, Mr. H. A. Stonham, Dr. A. T. Cope, and Dr. J. Loane will take part in the discussion.

WEDNESDAY (29th).—BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Dr. I. Murray: Note on Hayling Island. Paper:—Mr. W. Armstrong: Adjuncts to Spa Treatment.

THURSDAY (30th).—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM (11, Chandos-street, Cavendish-square, W.).—Cases and Specimens by Mr. Keeling, Mr. Hickman, Mr. Roll, Mr. Ormond, Mr. Parsons, and Mr. Taylor. Papers:—Dr. C. O. Hawthorne: On Intra-cranial Thrombosis as the Cause of Double Optic Neuritis in Cases of Chlorosis.—Dr. G. A. Berry: (1) On so-called Muscular Asthenopia; (2) Note on the Treatment of Cystoid Cicatrix following Cataract Extraction.—Mr. S. Snell: (1) Tumour of Orbit occasioning a peculiar Varicosity of Vessels on the Surface of the Eyeball; (2) Ringworm of the Eyelids in an Adult due to a Large-spored Tricophyton.—Dr. F. W. Edridge-Green: Some Observations on the Visual Purple.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (27th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. G. Little: Clinique. (Skin.)

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Baldwin: Surgical Emergencies.

TUESDAY (28th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. Taylor: Clinique. (Medical.)

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Bidwell: Plaster of Paris Splints.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Queen-square, Bloomsbury).—3.30 P.M. Dr. Tooth: Paralysis of the Cranial Nerves.

WEDNESDAY (29th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. J. Berry: Clinique. (Surgical.)

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. McAdam Eccles: Lantern Demonstrations in Hernia.

THURSDAY (30th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. J. Hutchinson, jun.: Clinique. (Surgical.)

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Mr. Edwards: Rectal Fistula.

CHARING-CROSS HOSPITAL.—4 P.M. Mr. S. Boyd: Surgical Cases. (Post-Graduate Course.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Kellock: Tortocollis.

FRIDAY (31st).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. D. Grant: Clinique. (Ear.)

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—5 P.M. Dr. Shuter: Preparation of Patients before an Anæsthetic.

EDITORIAL NOTICES.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

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Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

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MANAGER'S NOTICES.

THE INDEX TO THE LANCET.

THE Index to Vol. II. of 1901, which was completed with the issue of Dec. 28th, and the Title-page to the Volume, were given in THE LANCET of Jan 4th.

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METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Jan. 23rd, 1902.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation in Vacuo.	Maximum Temp. Shade.	Min. Temp	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
Jan. 17	30·52	WNW	...	50	48	42	43	44	Overcast
,, 18	30·33	N.E.	...	58	45	42	40	43	Overcast
,, 19	30·31	S.W.	...	63	46	33	33	33	Fine
,, 20	30·23	S.W.	...	61	52	33	43	46	Cloudy
,, 21	30·30	S.W.	...	71	53	46	46	48	Cloudy
,, 22	30·31	S.W.	...	61	54	48	48	50	Overcast
,, 23	30·20	S.W.	...	52	49	45	44	45	Overcast

During the week marked copies of the following newspapers have been received:—*Heraldo de Madrid, Meath Herald, Folkestone Telegraph, Hartlepool Mail, Brighton Gazette, Kent Examiner, Suffolk Chronicle, Sheffield and Rotherham Independent, Surrey Advertiser, Local Government Journal, Bristol Mercury, Dublin Express, Darlington Star, Citizen, Scotsman, Times of India, Pioneer Mail, Huddersfield Examiner, Sanitary Record, Local Government Chronicle, Mining Journal, Merthyr Express, Hertfordshire Mercury, Burton Chronicle, Glasgow Herald, Dundee Advertiser, West Sussex Gazette, Lincolnshire Advertiser, Barking Advertiser, Bolton Chronicle, Liverpool Mercury, Manchester Evening Mail, Kent Messenger, Middlesbrough Gazette, Birmingham Post, Aberdeen Press, Yorkshire Post, Cardiff Mail, Sheffield Independent, Sussex Daily News, Walton Gazette, Wiltshire Mirror, Bradford Observer, Morning Post, Essex Herald, Birmingham Argus, Newcastle Journal, Cambria Leader, Hereford Mercury, Exeter Times, Penrith Observer, Daily Graphic, Cambridge Chronicle.*

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